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1 IN THE CIRCUIT COURT OF THE STATE OF OREGON
              FOR THE COUNTY OF MULTNOMAH
 2
 3
   The Estate of JESSE D. WILLIAMS, )
 5 Deceased, by and through
    MAYOLA WILLIAMS, Personal
                                  ) Vol. 9-A
 6 Representative,
 7
                 Plaintiff,
                                  ) Circuit Court
                                   ) No. 9705-03957
 8
            vs.
 9 PHILIP MORRIS INCORPORATED,
                                   )
10
                Defendant.
                                   )
11
12
13
               TRANSCRIPT OF PROCEEDINGS
14
15
            BE IT REMEMBERED, That the above-entitled
16
17 matter came on regularly for Jury Trial and was
18 heard before the Honorable Anna J. Brown, Judge of
19 Department No. 7C, of the Circuit Court of the
20 County of Multnomah, State of Oregon, commencing at
21 8:30 a.m., Thursday, March 4, 1999.
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25
       Reported by Jennifer L. Wiles, CSR, RPR.
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1 APPEARANCES:
 2
             James Coon, Attorney at Law,
             William Gaylord, Attorney at Law,
 4
             Ray Thomas, Attorney at Law,
             Christopher Tauman, Attorney at Law,
 5
                appearing on behalf of the Plaintiff;
 6
 7
             James Dumas, Attorney at Law,
            Michael Harting, Attorney at Law,
 8
             Billy Randles, Attorney at Law,
             Walter Cofer, Attorney at Law,
 9
                appearing on behalf of the Defendant.
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1 GENERAL INDEX Page 3 Thursday, March 4, 1999 4 Reporter's Certificate 160 \* \* \* 5 6 7 WITNESS INDEX 8 OFFER OF PROOF: Direct Cross ReD ReX 9 William Farone By Mr. Gaylord 11 10 By Mr. Dumas 27 11 12 FOR THE PLAINTIFF: Direct Cross ReD ReX 13 Deposition reading of Walker Merryman 14 By Mr. Thomas 64 By Mr. Dumas 73 15 16 William A. Farone, Ph.D. By Mr. Gaylord 87 17 18 \* \* \* 19 20 21 22 23 24

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(March 4, 1999)
1
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 3
               A.M. PROCEEDINGS
 4
 5
             THE COURT: Good morning.
 6
             Good morning, everyone.
             COUNSEL: Good morning.
 7
8
             THE COURT: Let me read this, and then
9
     I'll be ready to go.
10
             I have now had an opportunity to read
11
     Plaintiff's written response to the Defendant's
12
     104 motion regarding Dr -- is it Farone? Is
13
     that how it's pronounced?
14
             I think it will be helpful if we start by
15
     having Plaintiff state the purposes particularly
16
     for which the challenged testimony would be
17
      offered, drawing distinctions, if there are any,
18
     between offering the evidence as evidence of
19
     Philip Morris' state of mind at the time the
20
      testing about which Dr. Farone was involved in,
21
     which is the subject of this memo, occurred.
22
             Because I think the analysis is different
23
     if its purpose is to who the state of mind,
24
     opposed to substantive evidence about a
25
      scientific principle, the latter of which I think
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does require me to follow the gate keeping functions outlined in the O'Keefe case and others.

1 2

So, to the extent there is a purpose beyond showing Philip Morris' state of mind and Philip Morris' intent and Philip Morris' conduct, then we do need to do an O'Keefe analysis, but I think Plaintiff needs to tell me first what Plaintiff intends.

MR. GAYLORD: Yes, Your Honor. I'll try to do that. I think I agree with your separating that into two subjects and then there's the easy question and then perhaps the harder question.

The easy question is, of course, part of our offer, and the reason why this witness should be allowed to testify about these subjects is because he was there and knows very well what the state of mind was at Philip Morris. He is in a position to testify that they understood the relationship between ammonia an pH and a free basing effect and heightened impact of nicotine on the smoker.

As our brief memo on this points out and cites several exhibits in evidence, that is all documents, but he's also a live witness to the

fact that is what they understood they were doing 1 2 at the time. He's also an imminently qualified 3 4 scientist and observer of these facts since his time at Philip Morris and qualified to express 5 6 his opinions about the basic science of this and 7 the reasonableness of this and to explain his familiarity with subsequent documentation by 8 Philip Morris and others of this effect and 9 10 confirmation of it by Philip Morris and others. 11 So, that is where I think we would like 12 to go, that far, because he's got the 13 qualifications and because he's here and because 14 he holds those opinions. 15 To the extent that that is controversial 16 and that you need to perform a gate keeping 17 function, we would be happy to put him on and let you --18 19 THE COURT: Well, if your proffer for the

THE COURT: Well, if your proffer for the jury is intended to include both the purposes I summarized, then I think the Defendant's motion requires us to do the gate-keeping analysis.

 $\,$  MR. GAYLORD: Yes. We are prepared to do  $\,$  that.

THE COURT: All right.

20

21

1 Are there any other purposes besides those two general purposes having to do with this 3 ammonia pH issue? 4 MR. GAYLORD: Not except to say, of 5 course, that it fits within the context of all of 6 the rest of his testimony, but I don't think 7 there's a separate distinct goal of that. 8 THE COURT: All right. 9 Anything the defense wants to say 10 preliminarily to the witness testifying? 11 MR. DUMAS: No, Your Honor. THE COURT: Does the defense agree that 12 13 Dr. Farone may offer evidence about Philip 14 Morris' state of mind and Philip Morris' conduct 15 relative to the addition of ammonia and Philip Morris' awareness of an association between 16 17 ammonia and a smoker's experience? 18 MR. DUMAS: Certainly. THE COURT: Without necessarily tying it 19 20 to the scientific base for that. 21 MR. DUMAS: Certainly, Your Honor. 22 I would agree that the 104 function that 23 we are here to do this morning deals with opinion 24 and conclusions of scientific matters and would 25 not directly bear on factual matters concerning

what he saw, what he heard, what documents were 1 2 created by Philip Morris at the time he was 3 there. 4 I would just mention, however, that some 5 of those matters, those factual matters, there 6 may be relevance issues which really would be 7 independent I think of the 104 hearing. 8 There may be relevant relevance issues to 9 those facts, depending on the Court's ruling 10 today on the 104 issues. 11 THE COURT: So, you are suggesting I need to take up the one first and then the other and 12 13 not rule on relevance now? 14 MR. DUMAS: Well, I think probably not, 15 Your Honor. I think you just need to rule on the 104 science issues this morning. I think the 16 17 relevance issues will have to be taken up as the 18 doctor testifies in depth regarding what he saw, 19 what he heard, what he did when he was at Philip 20 Morris. 21 THE COURT: All right. Mr. Gaylord. 22 23 MR. GAYLORD: All right. 24 Mr. -- Dr. Farone, will you take the 25 stand, please?

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THE CLERK: Raise your right hand,
1
2
     please.
                WILLIAM A. FARONE, PH.D.
5 was thereupon called as a witness on behalf of the
6 Plaintiff and, having been first duly sworn, was
7 examined and testified as follows:
             THE CLERK: Please be seated. And if I
8
9
     can get you to move into the microphone a little
10
     bit, and this way a little bit, thank you.
11
             And please state your name. Spell your
     first name and your last name.
12
             THE WITNESS: My name is William A.
13
     Farone, W-i-l-l-i-a-m F-a-r-o-n-e.
14
15
             THE COURT: Thank you.
16
             Counsel.
17
             MR. GAYLORD: Dr. Farone, for purposes of
18
     this proceeding, the rules permit leading
19
     questions and other non-observances of some of
20
     the formalities. So, for efficiency, I'll try to
21
     do that, so far as I can think of the questions
22
     to lead you.
23
             First, I'm going to ask the Court and,
24
     through the Court and counsel, do we need to do
25
     much to establish his qualifications?
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You are, sir, a Ph.D. in chemistry, with 1 2 advanced degrees and years and years of 3 experience working in chemistry of products? THE WITNESS: That's correct. 4 THE COURT: Is there a V.C. that I can 5 use for purposes of this gate keeping piece? 6 7 MR. GAYLORD: We can get you one, Your 8 Honor. 9 THE COURT: Is that all right? 10 MR. DUMAS: That is fine with me, Your 11 Honor. THE COURT: I'm just trying to be 12 13 helpful. 14 MR. GAYLORD: I'm just trying to get a 15 sense of how much we need to dwell on his qualifications. 16 17 THE COURT: You are telling me he's an 18 imminent scientist whose opinion I can consider 19 under --20 Believe me, sir, I don't mean to be disrespectful. I'm trying to be responsive to 21 22 counsel's point. 23 MR. GAYLORD: Right. 24 THE COURT: The gate keeping function is 25 going to depend on qualifications. I can read

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this and consider it. You don't need to ask
1
    those questions right now. And we'll mark a
     resume as a Court's exhibit for the record, in
 3
 4
     any event.
 5
             MR. GAYLORD: Thank you.
 6
                   DIRECT EXAMINATION
 7
8
9
10 BY MR. GAYLORD:
11
     Q. Let me start this way, Dr. Farone.
12
            From your educational background and your
13 areas of specialty and your years of experience
14 working in chemical products industries, including
15 your leadership of research departments at Lever
16 Brothers, I don't know if I'm adequately describing
17 that at all, and your seven years as the Director
18 of Applied -- am I getting it -- Applied Research
19 at Philip Morris?
20
        Α.
            That's correct.
21
            And your years since Philip Morris,
        Q.
22 operating your own business in the chemical
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23 products field, do you have an acquaintance with 24 the concept of free basing, if I can just use the

25 vernacular for it?

- 1 A. Yes, I do.
- Q. And with respect to the subjects here of adding ammonia to a cigarette product to effect the 4 pH of the filler material -- if I'm getting the 5 right one -- and to have an effect on nicotine 6 delivery and/or impact on the smoker, are those all 7 subjects within your knowledge and experience from 8 your years at Philip Morris and your awareness of 9 the literature in that field, outside of your years 10 at Philip Morris?
- 11 A. Yes, in general, the chemical phenomenon, 12 going back to probably my natural products courses 13 in 1960.
- Q. Is the phenomenon, the chemical
  phenomenon of ammonia acting on the tobacco
  material, tobacco-like material, if you will, and
  increasing pH and releasing a greater amount of
  nicotine into a gaseous phase, is there anything
  novel or controversial scientifically about that
  concept?
- 21 A. Not in my opinion.
- Q. All right.
- 23 Is the chemical formula or the chemical
- 24 actions that take place in that process at all
- 25 controversial from a chemical standpoint in?

- 1 A. Not in my opinion. They are taught in 2 college.
- Q. Are those relationships between increased ammonia, increase of pH release of nicotine, into a gaseous phase, and the resulting change on the makeup of the nicotine in the smoke all subjects that were known and understood and accepted in the research departments at Philip Morris while you were there?
- 10 A. In my opinion, yes.
- 11 Q. And were there also conclusions sought 12 and found by Philip Morris during and before your 13 time there about what impact the phenomenon would 14 have on the smoke and the smoker?
- 15 A. Yes.
- Q. Summarize for the Judge what was known about that while you were at Philip Morris?
- A. Well, in any alkaloid, which nicotine is an example, we have a phenomenon which is called the PK. It's the pH or, if you will, at which it becomes neutral. And if you exceed that you put more and more of the material into what's called a free base form, and if you are below that you have more and more of the material in the so-called protonated form.

This is an equilibrium. It's affected by many different variables, concentration, temperature, other materials that might affect the 4 pH of the substrate that it's in. And that is known for basically all alkaloids that have been of interest to people, cocaine, codeine, nicotine, nornicotine.

8 And it was known that if you manipulate 9 the pH of the substrate you will, in fact, create 10 more in the free base form which then evaporates or 11 goes into the vapor phase.

- Q. Now, with respect to the outcome of having done that on the smoker who's smoking that cigarette product, while you were at Philip Morris was there an understanding and belief among the scientists at Philip Morris about how increasing pH and increasing free base nicotine would affect the smoker?
- A. That is more difficult. I mean, there's an understanding that it had an affect in the satisfaction and in the descriptors that are used in describing how one appreciates the cigarette.

  But I do not. There was, as far as I can recall that I was aware of at the time, while I was at Philip Morris, no study, for example, which

- 15 1 showed that blood 11 cotinine increased 2 proportional to the amount of ammonia. In other 3 words, there were physiological studies that I 4 never saw when I was there. 5 Q. Let me show just a couple of things from 6 our document bank that are in evidence in the case. 7 This is Exhibit 58. 8 MR. DUMAS: I'm sorry. What No, Bill? MR. GAYLORD: 58. I'm not sure how much 9 10 I have to zoom to read it. 11 BY MR. GAYLORD: 12 Q. But it's March 31, 1966 document, with 13 names of Thompson, T-h-o-m-s-o-n, and Mayer, 14 M-a-y-e-r, progress report, nicotine and smoke pH. 15 And in the conclusions, it says: "Nicotine delivery can be controlled via 16 17 filler or smoke pH adjustment." 18 Is that one of the conclusions or pieces 19 of information that was known to you during the
- 21 A. Yes. And I work with both of those 22 gentlemen.

20 time there?

Q. And a couple of excerpts from Plaintiff's Exhibit 92, which is a October 1974 document, entitled "Smoke Impact From a Psychologist' Vantage

- 1 Point," by T.R. Shorey. And is that a document you 2 are familiar with?
  - A. Yes, it is.
- Q. And I'll just read this quote. This is from a section entitled "Smoke Constituent for Impact."
- Was impact a term of art used at Philip
  Morris to describe what you have already described,
  satisfaction and effect on the smoker?
- 10 A. Impact and satisfaction are two separate 11 descriptors, but they generally relate to the 12 effect of what you inhale and the feeling that you 13 get, either wellbeing or pleasure that is 14 associated with nicotine.
- 15 Q. Okay. And I'll quote twice from this 16 1974 document, quote:
- "Suggesting that smoke impact is due to nicotine, however, is nothing new. The important factor though is not the amount of nicotine in the smoke, per se, but rather the amount of free nicotine in the smoke which determines degree of smoke impact."
- 23 A. Yes.
- Q. And is that the same conclusion you have shared with us has having been assumed and believed

- 1 in the research work at Philip Morris while you
  2 were there?
  - A. Yes.
- Q. And in the section entitled "Importance of PH," quote, "Thus, the amount of free nicotine available to the smoker is determined by the degree of alkalinity (or pH) of the smoke, as well as own degree of alkalinity."
- 9 Is that also expressing the same basic 10 concept?
- 11 A. The basic concept, but it's only part of 12 the story. It refers to the pH of the smoke. The 13 pH of the tobacco is equally important in 14 determining how much nicotine is released from the 15 tobacco.
- 16 Q. And are those two different concepts?
- 17 A. They are.
- Q. And are you familiar with documents from scientific work at Philip Morris in later years,
- 20 after your time, that address these same subjects 21 and carry them forward?
- 22 A. Yes, I am.
- Q. Plaintiff's Exhibit 142, a February 5th,
- 24 1992 document, Philip Morris letterhead, to R.D.
- 25 Kaiser, from F.P. Gullotta, subject 1991

- 1 Accomplishments for Project 1620. Whatever that
- 2 is. Item 2. Are you familiar with Dr. Gullotta?
  - A. Yes, I am.
  - Q. He worked there while you were?
- 5 A. He did.
- 6 Q. And if I have got the right part of this,
- 7 and I'll let you look at this if you don't have it,
- 8 Item 2, designed and cigarettes prepared from
- 9 filler to which acids and bases had been applied.
- 10 Filler, just by the way, just refers to
- 11 the tobacco material that makes up the rod of the 12 cigarette?
- 13 A. The mixture of tobacco that goes into the 14 rod, yes.
- 15 Q. This is really hard to read, but
- 16 demonstrated a systemic relationship between
- 17 increases in filler pH and increases in gaseous
- 18 phase, presumably unprotonated nicotine?
- 19 A. That's correct. That is -- and that is
- 20 the most important feature of this form of
- 21 manipulating nicotine is the filler pH.
- Q. And so this is a statement in Philip
- 23 Morris about what they have done in 1991, and it
- 24 includes that they establish the relationship
- 25 between those two concepts?

Well, I think it was established earlier. Α. 2 This is just sort of a continuation of study. Q. Okay. And then maybe more to the point 4 of what we are getting at here, Item 3, 5 demonstrated that the addition of bases to cigarettes enhances subjective and 7 electrophysiological responses? 8 And is that referring to two different 9 aspects of the -- I'm not going to use impact 10 because that is a word with some strings 11 attached -- let's say effect? A. Well, the first one refers to what the 12 13 person tells you they experience, the subjective. 14 The second one refers to brain wave patterns or 15 some other electro, something you're measuring so 16 they don't have to tell you about it. You can 17 measure it. 18 Q. Okay. So this document is saying that, 19 as of this 1991 research season, so-to-speak, 20 Philip Morris has demonstrated to itself that this exact chain of events that we have been talking 21 22 about, increasing the base, raising the pH, the 23 same thing, I guess, increasing the amount of free 24 nicotine in the smoke, as both subjective and 25 objective effects on the smoker?

- 1 A. That is what it says.
- Q. All right. And that is the same concept that was motivating the addition of ammonia to the cigarettes during the time that you were there and aware of it firsthand?
- A. I was not the addition ammonia. The addition of compounds that combusted.
- 8 Q. Okay.
- And do you hold opinions as a scientist, independent of the first-hand knowledge you had as a team member at Philip Morris, that there is a relationship between -- I was going to say manipulating, but let me say managing the contents of the cigarette so as to increase the pH of filler and enhance the effect on the smoker?
- 16 A. Yes that was considered to be a very 17 important part of Philip Morris cigarettes as 18 distinguished from competitive cigarettes.
- 19 Q. Okay. And that reminds me of one more 20 thing I wanted to be sure and do here. Let me just 21 take a second to look. I already have that.
- I'm going to show you, I'll hand you a copy of Plaintiff's 88, and I'm going to keep one to use on the viewer.
- MR. GAYLORD: Your Honor, I'm reminded by

Mr. Coon to tell you that the copy that I'm 1 showing to Dr. Farone we would intend to offer of this exhibit has some redactions of material, in 3 4 keeping with prior discussion. THE COURT: So we are not to have heart 5 6 failure when we see on the screen something that 7 is not redacted? Is that the point? 8 MR. GAYLORD: I guess so. But I don't 9 think it's that heart failure is likely. 10 THE COURT: All right. 11 BY MR. GAYLORD: 12 Q. I'm just following up on some of the 13 history of the document. And that document is 14 marked secret. We know it's an RJR document. It's 15 entitled "Implications and Activities Arising from 16 Correlation of Smoke pH with Nicotine Impact on 17 smoke qualities and Cigarette Sales." 18 By its contents, we know that it's from 19 1973. It is making projections for the first 20 quarter of 1974. It has a list of subtitles that are very interesting because it's largely comparing 21 22 RJR products to a number of others but principally 23 Marlboro. 24 And it gets to the point of Item 2

25 historical data trends in brand comparisons talks

1 about seeking out significant property differences. 2 We gather available historical and current data on 3 our brands and competitive brands and made 4 comparisons. 5 It soon became apparent that in recent 6 years corresponding to recent sales performance, 7 the most significant difference between our brands 8 and Philip Morris brands and Kool has been in the 9 area of smoke pH. 10 Our data shows that smoke from our 11 brands -- this is outside of what's highlighted, 12 but the bottom paragraph -- and all other significant competitive brands in recent years has 14 been consistently and significantly lower in pH 15 than smoke from Marlboro and to a lesser degree 16 Kool. 17 Then the highlight, all evidence 18 indicates that the relatively high smoke pH shown 19 by Marlboro and other Philip Morris brands and Kool 20 is deliberate and controlled. This has raised 21 questions as to, one, the effect of higher smoke pH

on nicotine impact and smoke quality, hence, market performance; and, two, how the higher smoke PH

Smoke pH and Free Nicotine is the next

24 might be accomplished.

http://legacy.library.ucsf.@du/tie/xhtt@5a00/pdfindustrydocuments.ucsf.edu/docs/sjxd0001

1 heading. In essence, the cigarette is a system for 2 delivery of nicotine to the smoker in an attractive 3 useful form. Skipping a little bit, as the smoke pH 5 increases above 6.0 an increasing proportion of the smoke nicotine occurs in free form, which is 7 volatile, rapidly absorbed by the smoker and 8 believed to be instantly perceived as nicotine 9 kick. 10 Chart 8 shows how proportion of free 11 nicotine increases as pH goes higher. 12 "Marlboro and Kool smokes contain more 13 free nicotine than our comparable brands; hence, 14 would be expected to show more instantaneous kick 15 than our brands." "As a result, higher smoke pH in the 16 17 current Marlboro, despite a two-thirds reduction in 18 tar nicotine over the years calculates to have 19 essentially the same amount of free nicotine in the

22 of free nicotine in Marlboro smoke is almost three

25 the nicotine kick, increasing the pH causes other

"Thus, currently, the calculated amount

And on further, "In addition to enhancing

20 smoke, as did the early Winston."

23 times the amount in Winston smoke."

21

24

http://legacy.library.ucsf.@du/tie/xtnt05a00/pdfindustrydocuments.ucsf.edu/docs/sjxd0001

1 changes, particularly when the increase in smoke pH 2 is achieved by adding ammonia to the blend, " and it 3 goes on from there. "Subsequent," this is market correlations 5 and implication, "Subsequent detail analysis by marketing research of our pH and free nicotine 7 data, along with sales data and other factors, has 8 confirmed the strongly positive correlation between 9 free nicotine in smoke determined by pH and total 10 nicotine in smoke and market share performance." 11 And under research activities current and 12 planned, "Methods which may be used to increase 13 smoke pH and/or nicotine kick include increasing 14 the amount of strong burley blend, reduction of 15 casein sugar used on the burley blends, use of 16 alkaline additives usually ammonia compounds to the 17 blend," And then it says methods one through three 18 in combination represent the Philip Morris 19 approach. And, Dr. Farone, does that RJR document, 20 21 first off, support all of the things we talked 22 about so far this morning, about your knowledge of 23 Philip Morris' point of view and state of mind 24 about this chemistry?

It supports it. There are some small

A.

- 1 technical inaccuracies of what they are
  2 understanding in that particular time frame that
  3 became more clearer as more research went on, but
  4 it does support it, yes.
- 5 Q. And does that document contribute some 6 corroboration to opinions you would express about 7 these subject?
- 8 A. Yes, and also ties with my experience 9 there around 1980 when it turned out that we 10 determined that RJR started adding more compounds 11 to cigarettes that provided the higher level of 12 ammonia and that created a big stir within Philip 13 Morris.
- Q. Sounds like this is sort of a competitive reverse-engineering contest between two companies?
- A. That was -- well, not reverse engineering at the time. At the time it was concluded that RJR had determined -- the let's call it for lack of a better word -- the function of the ammonium compounds, and they had decided t follow suit.

  MR. GAYLORD: Your Honor, I think that concludes what I would put forth as an offer of proof for Dr. Farone's ability, qualification,
- knowledge base, and lack of controversy, frankly, about the subjects that have been challenged in

1 the motion and my support for an offer of 2 Plaintiff's Exhibit 88 into evidence. 3 THE COURT: I didn't hear questions 4 asking the witness to explain the science of the 5 phenomenon beyond just the general chemical reaction in equilibrium, and I'm assuming you are 6 7 not asking more of the witness in terms of explaining the underlying sciences. If you are, 8 9 you probably need to lay that out so that we have 10 got it all out. 11 MR. GAYLORD: Yeah. I think that is a 12 good point, and I should have made it more 13 explicit. 14 I believe I would stop short of asking 15 Dr. Farone to describe the human physiological 16 mechanisms of how the ammonia pH free base effect 17 changes anything inside the person's body. THE COURT: Okay. 18 19 Cross. 20 21 22 23 24 25

## CROSS-EXAMINATION

1 2

10

3 BY MR. DUMAS:

- Q. Doctor, is it my understanding that you do not intend to offer an opinion as an expert scientist or a chemist that the alleged increase in free nicotine as a result of the use of ammonia increases or causes tobacco to become addicted or more addictive?
  - A. Yeah, I wasn't asked that. So, no.
- 11 Q. And that would be consistent with your 12 background as a chemist. You are not a 13 pharmacologist. You are not a medical physician. 14 You're not a toxicologist. And obviously you are 15 not an expert in addiction medicine?
- A. No. But I would disagree with that characterization. I think you are aware that I was in charge of all of the toxicology submissions that were made to any government regulatory agency at Lever Brothers from 1972 to '75. And so it became necessary for me to be very, very sure of what was going on toxilogically, including bioavailability studies on things like fluoride and trichlosan and other drugs.
- So, while I'm not going to testify about,

- 1 I mean, if I'm not asked about bioavailability
  2 here, I don't want to leave the impression that I
- 3 don't have the background or qualifications to
- 4 testify in that area.
- 5 Q. But now you are not a board certified 6 toxicologist. Have not practiced as a toxicologist 7 with regard to patients?
- 8 A. That's correct.
- 9 Q. Okay. And you have not examined, tested 10 humans or done any clinical trials comparing any 11 differences in the nature or the extent of nicotine 12 dependence between smokers who utilize cigarettes 13 that have been treated with ammonia as opposed to 14 smokers who utilize cigarettes that are not treated 15 with ammonia?
- 16 A. That's correct.
- 17 Q. And you are not aware of any such peer 18 reviewed studies or articles in the literature on 19 that subject?
- 20 A. That is a harder question. Peer-reviewed 21 literature?
- 22 Q. Yes.
- A. No, that's correct.
- Q. You mention EEG results. It's not been your practice, nor are you required to, interpret

http://legacy.library.ucsf.@du/tie/xtint05a/00/pdfindustrydocuments.ucsf.edu/docs/sjxd0001

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1 EEG results in relation to how they bear, if any,
2 on human substance dependency or addiction?
            I'm not trained in EEG.
        Α.
        Q.
            Doctor, would you agree that it is
5 presently not possible, on a reliable basis, to do
   any realtime measurement of pH levels of the vapor
7 phase of smoking in the human lung?
8
             THE COURT: In the human lung?
9
             MR. DUMAS: Lung.
10
             THE WITNESS: Well, first of all, the pH
11
     of the vapor phase doesn't have much meaning. I
12
     mean, by the time nicotine, for example, is in
13
     the vapor phase, they are discrete individual
14
     molecules. They are all free base. You don't
15
     get protonated free base in the vapor phase. So,
     I guess I don't understand the question, the
16
17
     relevance of the question.
18 BY MR. DUMAS:
19
        Q. Haven't you testified in the past,
20 Doctor, that it is of more relevance the levels of
   free base nicotine in the vapor phase, as opposed
21
22 to the particulate phase because it's the vapor
23 phase that gets into the lungs, whereas the
```

24 particulate phase is generally cleaned out?

No. I mean, the particle sizes. There

- 1 is a particle-size distribution of the aerosol.
- 2 And the larger particles are screened out. The
- 3 smaller particles are inhaled and then exhaled.
- 4 There is a region around two-tenths micron where
- 5 the particles are in fact lodged into the lungs,
- 6 and that is the part that gets into your lungs.
- 7 And to the extent that tar contains nicotine,
- 8 nicotine is delivered in the particulate phase.
- 9 In addition to that, there is the gas
- 10 between the particles, and that gas contains
- 11 nornicotine. So you have it both ways.
- Q. When you get to the bottom line in this
- 13 case, Doctor, this case involves the effect of
- 14 nicotine on the human body.
- 15 Isn't it true that there is no generally
- 16 accepted method by which to measure the pH of
- 17 tobacco smoke when it is in the human lung?
- 18 A. Yes. I can agree with that.
- 19 Q. Okay. There's no such studies, there's
- $20\,$  no empirical data that allows anyone to measure
- 21 that accurately?
- 22 A. Yes, that is true. But it's not relevant
- 23 to the issue of whether or not increasing the pH of
- 24 the filler causes nornicotine to get into the
- 25 smoke.

- Q. Doctor, would you agree that you have not conducted any experiments or clinical trials to measure whether there are any differences in the nicotine levels in the human bloodstream of smokers who smoke ammonia-treated cigarettes, if I can use that term, as opposed to non-ammonia-treated cigarettes?
  - A. Personally, myself?
- 9 Q. Yes.
  - A. No, I have not done that personally.
- 11 Q. Okay. And, in fact, there is no
- 12 empirical data or peer-reviewed published
  13 literature that sets out whether there is any such
- 14 difference in the level of nicotine in the human
- 15 bloodstream following cigarettes?
- 16 A. Well, there is. There is evidence to
- 17 that effect in the literature. That is, if you --
- 18 it's confounded by other things, but if you make an
- 19 aerosol out of nicotine, it is a drug delivery
- 20 device to help people cease smoking, and they use
- 21 that.

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- There's published literature that, in
- 23 fact, it doesn't get into your blood and into the
- 24 brain as fast as it does from a cigarette. And one
- 25 can infer from that data that, either one of two

- 1 things, that there's some chemical mechanism that
- 2 takes the cigarette nicotine to get into the blood
- 3 faster or a physical mechanism, that is either
- 4 particle size is better in a cigarette or there's a
- 5 chemical push, if you will, to get it into the
- 6 blood.
- 7 And my conclusion is that part of that is
- 8 due to the amount of free base nicotine in vapor
- 9 which occurs in the cigarette which doesn't occur
- 10 in the aerosol.
- 11 Q. I understand that is your hypothesis,
- 12 Doctor, but what wasn't my question.
- 13 My question was whether there are any
- 14 peer-reviewed published studies in the literature
- 15 that set out and compare the differences, if any,
- 16 in nicotine levels in the human bloodstream,
- 17 immediately following consumption of cigarettes
- 18 that have been treated with ammonia tobacco, as
- 19 opposed to not ammonia?
- 20 A. Oh, I see, just comparing a cigarette
- 21 with or without ammonia?
- 22 Q. Yes.
- A. Not comparing it to a medical aerosol?
- Q. Correct.
- 25 A. I don't know of any. Sorry.

- Q. And, likewise, you have not conducted any studies or clinical trials that demonstrate that the nature or the extent or severity of nicotine dependency or addictiveness is any different in smokers that utilize ammonia-based cigarettes as opposed to non-treated cigarettes?
  - A. No, I have not done that.
- 8 Q. Okay. Now, a couple of brief follow-up 9 questions, Doctor, to the questions that were asked 10 to you by Mr. Gaylord.
- You indicated that you felt, and correct me if I'm wrong, that the utilization of ammonia results in increased pH of tobacco itself? Did I hear that correctly?
- 15 A. Yes.

- 16 Q. Okay. Why is that important, Doctor, in 17 your opinion?
- 18 A. Okay.
- As you burn a cigarette, compounds that are converted to ammonia generate the ammonia,
- 21 which sweeps along the rod of the cigarette. You 22 also generate water during combustion.
- So, the tobacco behind the coal becomes
- 24 moistened, becomes wetter. If you smoke a
- 25 cigarette you can actually feel that softening,

1 wettening. And as the ammonia sweeps through wet 3 tobacco, this is very well known, it dislodges all 4 of the alkaloids, including nicotine, turns more of 5 them into free base form, and sweeps them all ahead of the burning coal, ahead of that whole front. So, it's important, the pH of the filler. 8 And what the sweeping ammonia through the wet 9 filler does is it increases the pH because ammonia 10 is converted to ammonium hydroxide base when it 11 gets on the moist filler, and that causes more free 12 nicotine to be released from that filler. That has 13 been shown in many experiments. Q. And wouldn't it necessarily follow from 15 that, Doctor, your analysis, that the result would 16 be an increase in the pH in the smoke itself? 17 There could be a relationship between the 18 two, but the problem is that the smoke, the 19 particles, depends on what you are talking about as the pH of the smoke. Once that is separated, gas 20 21 phase nicotine from the particles, it doesn't 22 matter much what the particle pH is anymore, and 23 that can be influenced by other -- like if you

24 added acids, organic acids, or other things in the

25 filler.

As a matter of fact, there's been a lot 2 of confusion over about how both, you know, acids 3 and bases can relate to the release of nicotine. 4 If you put nicotine in as an acid, organic acid, a 5 salt, that breaks down easier and goes into the gas 6 phase in and of itself.

The organic acid, if it was incorporated 8 in the particles, would actually drive down the pH 9 of the particle, but you have already released 10 nicotine.

So the use of nicotinic salts of certain 12 organic acids could in fact give you a greater amount of nicotine in the gas phase, without increasing the pH of the particle, depends on how 15 it's done and what the compounds are, and it's a 16 very complex issue, as you are probably aware of.

Yes. Yes. Ο.

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Finally, Doctor, you indicated that based 19 upon your experience as an employee and during your experience as an employee at Philip Morris, it was recognized, from your testimony, that the increase 22 in pH will result in greater impact to the smoker. And, as I understand your testimony,

24 impact was recognized to be the satisfaction, the 25 greater the pleasure derived from smoking

1 cigarettes. Α. And related to nicotine. Q. Doctor, you are not aware, the final 4 question, you have not conducted nor are you aware 5 of any studies which document that cigarettes that delivery increased free nicotine result in smokers becoming addicted to tobacco or more quickly 7 8 becoming addicted more severely? That's your 9 hypothesis. But there's no established documents 10 or studies that document that? Well, I didn't know it was my hypothesis, 11 12 but, no, I'm not aware of any. MR. DUMAS: That you, Doctor. 13 14 That is all I have. 15 THE COURT: I would like to first take up 16 argument on the exhibit because I need to be 17 refreshed about where we left it, and then I want to know the purposes for which it's offered, and 18 19 then take up any objections on the exhibit, and 20 then I'll summarize where I think we are on the 21 witness's testimony. 22 I don't think we have got a lot of

controversy here, but I may be missing something.

MR. GAYLORD: Subject to Mr. Coon

correcting me about what I think the history of

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that is, since he had the conversations with the Court, I believe, it's an ancient document and escapes the hearsay objection. I think the question left had been its relevance.

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THE COURT: What is the purpose for which it is offered?

MR. GAYLORD: It is offered as corroborative evidence of what Philip Morris knew about their own products and used in their work on their own products.

It is sort of an independent look at it, sort of as an outside laboratory's test results on Philip Morris' products.

And, in conclusion, they are all corroborative of both Dr. Farone's knowledge of Philip Morris' knowledge of the issues while he was there and his opinions now on these same subjects, the chemical relationships between ammonia, pH, free base effect, impact and I think that is it.

THE COURT: All right.

So, you are offering it over a hearsay objection as an ancient document, and you say it's relevant to corroborate the awareness in the industry of the state of the art, if you will,

about the effect of base or alkaloidal, alkaloid 1 2 3 You know, I quit chemistry my second year 4 of college, and there was a reason for it. But for external evidence of the 5 6 industry's focus on the issue of pH and effecting 7 the impact or delivery or satisfaction of the 8 cigarette. MR. GAYLORD: And I don't want to 9 10 overlook it also is a comparative analysis of Marlboro and other brands for their pH and for 11 12 the way that it has --THE COURT: And you're offering that for 13 14 the truth? 15 MR. GAYLORD: For the truth of the matters asserted in the document about the 16 17 relationship. 18 THE COURT: This is where you lost me on 19 the 403 part. It may be an ancient document, but 20 it's a document the science of which is not being 21 exposed to cross-examination in terms of the

known in the industry and it was the subject of 1 interest and concern with our competitors, such that there were studies being done and compared 3 4 comparative market analyses being done, but when 5 you are wanting to put before the jury the 6 science in the form of literally qualitative 7 analysis with what's in the Kool cigarette and 8 what's in this cigarette and what's in that 9 cigarette, without the opportunity of having the 10 testing cross-examined, that really in my mind 11 crosses over to the unfair prejudice line, if you are talking about offering it literally for its 12 13 truth. The science absolutely establishes it was 14 this rate or that rate or the another rate 15 without any opportunity for cross-examination. 16 So, I'm very concerned that that is not a 17 fair use of the document. 18 MR. GAYLORD: I think the -- I'm, of 19 course, inclined to accept that limitation in 20 terms of, because as this motion demonstrates, 21 this is apparently a controversial area, and the 22 fact that the industry is there at that time and 23 saying those things answers to the question is 24 this controversial? Is this some sort of weird 25 science or is it a fact known in the industry? I

don't think the measurements of the pH is where 1 2 the controversy is particularly. 3 So I'm kind of inclined to continue my 4 argument on that point, but perhaps the interpretation of why is it that way or what are 5 6 the, you know, RJR's -- RJR's interpretation of 7 the motivations of Philip Morris about this, I 8 guess, I would accept, I would continue my 9 proffer and accept that restriction with that 10 interpretation may be outside. 11 THE COURT: All right. Let me let the defense address the 12 13 exhibit and the witness's testimony, and then 14 I'll have a final word from Mr. Gaylord, and then 15 I'll rule. Would you count jurors, please? 16 17 Mr. Dumas. 18 MR. DUMAS: Your Honor, with regard to I 19 believe it was 58. 20 Is that what we are talking about, 21 Mr. Gaylord? 22 THE COURT: Mr. Gaylord, is it 88 or 58? 23 MR. GAYLORD: This is Exhibit 88. I did 24 show early Exhibit 58 earlier, they are RJR 25 documents.

MR. DUMAS: Your Honor, I was involved in 1 2 the original argument to the Court on this, but this is a hearsay document. There is absolutely 3 4 no question about that in my mind. THE COURT: Well, stop. Stop right 5 6 there. We are not talking about whether it's 7 hearsay. We are talking about an exception to 8 the hearsay rule. 9 MR. DUMAS: I know that. I know that. 10 THE COURT: Well, then don't preach to me 11 you have no doubt that it's a hearsay document. 12 We're not talking about whether it's a hearsay 13 document. We are arguing about whether an

MR. DUMAS: The reason for my comment was because Mr. Gaylord seems to be offering it for two grounds. He seems to be offering it for somehow notice in the industry, not hearsay, and then he also claims that there's a hearsay exception based an ancient document. Okay.

exception applies, and, if it does, whether 403

overrides the exception.

21 exception based an ancient document. Okay.
22 There is no evidence that I'm aware of
23 that this document ever reached Philip Morris or
24 was in the Philip Morris files. Therefore, how
25 can it be notice to Philip Morris?

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The fact that Reynolds may have conducted these studies for their own purposes is not notice to Philip Morris.

Whether the industry -- whether it's Reynolds or Liggitt or Lorillard or anyone else may have been aware in their own opinion about pH level of Marlboro and what effect that may or may not have on market share is not the point. That is not notice to Philip Morris of anything.

So, I don't see how it comes in as notice to the industry. That is not — that is not an issue in the case. What's an issue in the case is what did Philip Morris know? And this document does not purport to provide notice to Philip Morris of anything. Okay.

THE COURT: Okay.

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MR. DUMAS: If Mr. Gaylord is offering this document as an exception to the hearsay rule as an ancient document, Your Honor, it's not relevant because Philip Morris didn't have this document, number one. And, number two, 403, I believe, the prejudicial value far outweighs the probative value.

Providing some sort of blanket rule that every ancient document comes in because it's more

than 20 years old would, under certain 1 2 circumstances, defy, deprive a party to 3 fundamental fairness. 4 We can't cross-examine these Reynolds 5 scientists. We can't cross-examine how these 6 tests were done or how they were interpreted. THE COURT: I think you're preaching to 7 8 the choir on that one. 9 MR. DUMAS: Very well. Then I'll stop 10 preaching. 11 THE COURT: I agree with the substantive 12 argument that the scientific content of the 13 document, even if it is otherwise admissible as 14 an exception to the hearsay rule, is unfairly 15 prejudicial because there's no opportunity to cross-examine or test the bases of how those 16 17 conclusions got there. 18 So, I agree that if the exhibit was 19 admissible, in any event, there would not be 20 usable for any substantive evidence of the 21 competence of the scientific testing that is in 22 the document. 23 Now, let's go back a couple of steps. 24 The document is an RJR Reynolds document. 25 Yes?

MR. GAYLORD: Yes, Your Honor. 1 2 THE COURT: Available to the Plaintiff 3 because it's on the Internet? MR. COON: That is one reason, yes. 4 5 THE COURT: Okay. 6 Is there any evidence that this RJR 7 document was available or known to Philip Morris? 8 MR. COON: Not pre-litigation, no. 9 THE COURT: Well, not for my purposes 10 today. 11 If I had an RJR witness here to testify 12 that it was known in the industry that pH 13 affected impact and the satisfaction of a 14 cigarette, because it effected amount of nicotine 15 that was free base, that might be relevant 16 evidence. 17 That RJR has internal secret documents 18 which it's obsessing over the pH of the nicotine 19 and comparing it to its apparently significant competitor Philip Morris, shows that RJR was very 20 21 much aware of the issue, but I don't think that 22 it necessarily shows that Philip Morris was aware 23 of the issue. 24 So, I think -- are you about to rise to 25 Mr. Gaylord's proffers?

I think Mr. Dumas' point deserves some 1 2 consideration in response. 3 MR. GAYLORD: I wonder if I could have a 4 moment? THE COURT: Have a moment, but don't 5 6 expect me to take up all three of you. 7 Do we have all 16 jurors? 8 THE CLERK: We do, Your Honor. 9 MR. GAYLORD: Your Honor --10 THE COURT: Yes, Mr. Gaylord. 11 MR. GAYLORD: I think of the two kind of 12 competing arguments that I'm hearing from the defense about this, once we are past the hearsay 13 14 question and the relevance question, a relevance 15 question arises. 16 You know, as with 403 issues, generally, 17 it's either not relevant or too relevant. It's 18 kind of the competing sides of it. 19 The too relevant issue, I think, there's 20 a logical claim that it is too relevant in some 21 senses and, as I said earlier, for the 22 interpretations that it draws about the kind of 23 underlying facts there. 24 But if we step back from that one step to 25 the question that seemed to have been a

controversy that arose with this 104 motion this 1 morning, is there a relationship between ammonia an pH, is this a cigarette product that 3 4 capitalized on that? 5 I think this document shows a relevant 6 fact which is that the industry didn't consider 7 that controversial, and I think in conjunction 8 with Philip Morris' documents one of which is 9 within the following year after this entitled, I 10 showed, in '92, I showed this in our motion, 11 "Smoke Impact From a Psychologist's Vantage 12 Point, " this is corroborative of the same point. 13 THE COURT: But let me say this and maybe 14 it will be helpful. I have considered the RJR 15 document in this 104 hearing because I may consider matter that is not admissible, and I 16 17 have considered it as corroborative of the 18 witness's general analysis and the chemical 19 properties about which he has been testifying. 20 And my basic knowledge of chemistry took 21 me far enough to where I could follow what he's 22 saying. 23 He's saying, as a Ph.D. in chemistry, 24 there is a chemical reaction, an equilibrium, you

apply this energy at this end, you light the

cigarette and it creates certain chemical compounds and they, in the equilibrium, produce something else, the effect of which is an increased pH in both the filler, the material in the rod, and in the smoke.

But when the nicotine in the smoke is free base, there is no controversy, it seems to me, that Philip Morris was aware of and took the position that increasing the pH increased the smoker's positive response to the experience.

This witness did not testify in response to your questions, Mr. Gaylord, that that means more addictive. All right.

I understood that to be the subject of this motion, the addiction conclusion. And you didn't ask the question. He doesn't seem to be offering that opinion. And that may be an argument and an inference the jury can logically draw when hooking everybody else's testimony together.

But it seems to me we don't have a controversy for purposes of the 104 proceeding, if I'm summarizing the proffer correctly.

The witness may testify. He's imminently qualified as a chemist to testify about the

chemical properties of what pH is -- we have got 1 a little bit of that through Benowitz -- what the increasing it past or the higher PK, the more 3 4 likelihood there is free base. The more free base, the more the smoker's report a positive satisfaction, a positive impact, wellbeing, pleasure, all of those things.

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The witness, A, doesn't need to testify about addiction, and I don't yet have a foundation from which I could allow him to do that over the Defendant's objection.

Now, if the defense takes the position in cross-examination that this is controversial, this was unknown in the industry, this is something that is unique to the witness, he's making it up, you know, pH effect on nicotine in the filler and in the smoke is something totally unreliable, then I think we have a different picture in the 403 balance about the extent to which what others were doing in the industry about this may bear.

22 But right now I think the 403 balance 23 falls in favor of excluding RJR's focus on pH 24 because there's no direct evidence it impacted 25 Philip Morris and there is no direct challenge that Philip Morris wasn't doing exactly what this witness is about to tell the jury they were doing.

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So, to the extent it's not challenged, the need for evidence which is a very important part of the 403 balance, undercuts it, and its risks outweigh its probative value --

MR. GAYLORD: If I can address --

THE COURT:  $\mbox{--}$  is where I am, before they have even had a chance to talk. So, they need to talk in a minute.

MR. GAYLORD: Just very briefly, I may have been over-interpreting the Defendant's position about where we are on this because I had perceived that there was a challenge.

And if, in fact, Defendants are going to stipulate that this was not controversial, that that was a known fact, that this is the position that Philip Morris was in and knew it was in at that time, then I would agree that undercuts the relevance and the need for this document.

I understood both from the motion that was filed this morning and from other things that we have seen in cross-examination of witnesses and from opening statements about that ammonia is

in everything and that there's nothing special about it here and that there was no manipulation of anything, I believe opening statements lay the foundation for relevance of this document, unless counsel is prepared to stipulate now that that is not their position.

THE COURT: Well, let's hear from counsel.

But I want to say, in my 104 capacity, that I heard nothing from the witness in response to your questions, Mr. Gaylord, that I would presently exclude on the basis that he is not qualified to offer those opinions because the proffer was simply flat-out chemistry and fact evidence about what is going on in Philip Morris relative to the pH chemistry and the interest in pH chemistry as it related to in a way that is not explained bioavailability-wise, but as it related to the smoker's satisfaction, impact, wellbeing or pleasure.

MR. GAYLORD: I don't want to lose one point there, and just for clarification before we do this in front of the jury.

I'm not offering Dr. Farone and haven't asked him questions about bioavailability and, as

counsel pointed out, nicotine addiction, but I think that is a different question than what was the mind set of he and his staff and his colleagues at Philip Morris about whether these things affected that.

THE COURT: I agree. And I don't mean to suggest that you can only do chemistry. The witness is, in fact, a fact witness about what went on at Philip Morris. But what his scientific presentation was this morning was really, in my mind, and I haven't yet heard the defense analysis, but in my mind, it is not scientific evidence for purposes of a gate keeping function.

He hasn't said anything from a witness stand that isn't just basic chemical equilibrium analysis, acid-base analysis, and an expression of fact about what Philip Morris thought that did relative to the user's desire to smoke their product. That is what I'm hearing.

MR. GAYLORD: And I have asked him his opinion, and I will ask him his opinion about all of these things, too, within what we have talked about.

25 THE COURT: As long as the opinion does

not stray into asking this witness to comment 1 2 about addictiveness or conclusions about making the cigarette more addictive, as long as the 3 4 witness is not asked questions about bioavailability explanation theories, I don't 5 6 think we are going to have a problem based on 7 what I have heard. 8 But we still haven't heard Mr. Dumas. 9 So, we better let him jump in. 10 MR. DUMAS: Your Honor, with regards to 11 the 104, I don't think I have to jump in. 12 concur with the Court's comments. That is 13 exactly what I was thinking about. If he's not 14 going to testify about bioavailability, increased 15 addiction, I don't think we have a problem. 16 I would ask, in the spirit of the Court's 17 general rule, since it was Mr. Cofer who gave the 18 opening statement, he would like to respond to 19 counsel's request for a stipulation, with the 20 Court's permission. 21 MR. COFER: Not only that, I am going to 22 cross-examine Dr. Farone. So, I want to make 23 sure that we are all on the same page, consistent 24 with Your Honor's ruling and in spirit of the

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offer.

Where I think we are going to be is that we will stipulate that the science, under science, if you change the pH of the surrounding environment enough, you can affect the distribution of protonated and unprotonated nicotine. Where I think the issues are is does that happen in cigarettes? And, second, what does that mean to the smoker?

THE COURT: Well, right now I believe this witness is qualified to testify as a fact witness that Philip Morris was aware that increased pH increases the positive response from the consumer.

That there is free nicotine in both the smoke and in the filler in the rod, that that free nicotine was something about which Philip Morris was concerned, in order to increase the reaction, the impact, whatever you want to talk about, whatever word you want to use, he can talk about all of the chemistry involved in that.

21 What I understood the 104 motion to 22 address is whether there is a basis for the 23 witness to offer an addiction conclusion from 24 that evidence, and that is not being proffered at 25 this point.

And the terms bioavailability aren't 1 going to be used in the form of the chemical chemistry analysis for purposes of the jury. 3 4 So, right now I'm sustaining the 5 Defendant's objection to use of Exhibit 88. 6 The extent to which a controversy 7 develops in cross-examination, may be the basis 8 to open the door to that, because the more there's an argument that this is really novel, 9 10 controversial stuff, the more it's fair to allow 11 the Plaintiff to show it isn't controversial at all. The No. 1 competitor for Philip Morris was 12 doing the very same work and. You know, that is 13 14 where I see the 403 issue going. 15 MR. GAYLORD: One last point. I don't 16 want to trip anybody up or be out of bounds at 17 some point. It may be appropriate in the course 18 of his testimony to show documents from Philip 19 Morris that corroborate using bioavailability 20 language. 21 THE COURT: Thier language is their 22 language. 23 MR. GAYLORD: Yes. 24 THE COURT: Philip Morris' language is 25 always available to use in the trial. But

bioavailability is taken on a sort of an alarmist 1 term here, and it's been the subject of both of the 104 motions. The witnesses should not use it 3 4 in the form of individual opinions about the 5 biological response to the chemical evidence that is being described, but it didn't sound like this 6 7 witness was going there. 8 So, you keep looking at me in a very 9 worrisome way. So, I'm wondering am I mishearing 10 something? 11 MR. GAYLORD: No. I just want to be sure 12 that I'm not causing a problem for myself and the 13 14 If I go into the subjects of Philip 15 Morris' subsequent confirmations of bioavailability and his ability to interpret that 16 17 term in that context, that is all I want to be 18 sure of. 19 THE COURT: No. No, he's a Philip Morris knowledgeable 20 21 witness. If Philip Morris uses the word, he can 22 explain what he thought it meant in that context. 23 What I'm saying, their motions have been

focused on, is what was originally denominated,

the Benowitz bioavailability afferent nerve

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theories, asking a witness to tell the jury what those theories are, as a matter of what they call hypothesis.

I think you are absolutely in safe territory to talk to witness about the facts Philip Morris was working on at the time and the chemistry of pH and how it affects nicotine in the two ends of the cigarette and what Philip Morris thought about that, relative to its impact on the smoker.

One last thing.

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MR. COFER: Okay. Just so we are all on the same page, I just want to make sure that I'm not doing anything that I'm not supposed to.

Where we are is science does say that if you change the pH of the surrounding environment you can affect the distribution of bound and free nicotine. That is not controversial.

The issue is does that happen in commercial cigarettes? I may well ask him that. Any evidence that happens in commercial cigarettes?

23 THE COURT: Well, I think I know what his 24 answer will be, based upon what I heard in the 25 offer of proof, but let's wait and see.

1 MR. COFER: Yeah. 2 THE COURT: I suspect you know what his answer is going to be. I can't imagine you 3 4 haven't been here before. MR. COFER: We have been here before. 5 6 And the next question is, of course, the 7 one that we are all talking which is what does 8 that mean, bioavailability, addiction? Obviously, if I ask that question, I would be in 9 10 peril, perhaps. 11 THE COURT: You know, everything 12 Mr. Gaylord asked the witness in the proffer, he 13 my ask. 14 MR. COFER: All right. 15 THE COURT: And I'm ruling out Exhibit 88 16 as a document for the jury. 17 If you think, Mr. Gaylord or Mr. Coon or Mr. Thomas, the door has been opened, just let me 18 19 know. We'll take it up outside the presence of the jury on redirect on No. 88, but I think this 20 21 witness is on perfectly safe ground talking about 22 chemistry and to talk about what he knew was 23 going on at Philip Morris at the time. 24 For the record, I would like to have the 25 resume of Dr. Farone marked as Court's 3.

If this is your only copy, I'll give it 1 2 back, and you can give me a new one. 3 MR. GAYLORD: That is my only one. 4 THE COURT: Right. 5 Is there anything else now before we 6 bring in the jury? 7 MR. GAYLORD: I have a couple of points, 8 again to avoid tripping up, and I think this is 9 the opportune time. 10 I want to be sure. Part of what I'm 11 saying is I wasn't the one paying as close 12 attention as my college was when some of the 13 motions in limine have been dealt with. So I 14 want to be sure about a couple of points. 15 The word usage of this witness. He came 16 into the controversy and litigation of cigarette 17 litigation basically through the auspices of the 18 FDA who subpoenaed him, if I'm not mistaken, or 19 somebody subpoenaed him. But he became involved through government agency investigations, one way 20 21 or another. And I think that is a part of the 22 story that deserves to be told and needs to be 23 told for credibility sake and so forth. 24 But I don't want to be -- I don't think 25 anybody would be surprised to learn that there's

an FDA. I don't think the jury is in the dark about that. But I understand there's some restrictions about talking about the FDA, and I don't want to cross a line.

THE COURT: Well, the restrictions we were concerned about had to do with other tobacco litigation, other tobacco settlements, the Minnesota litigation, and so forth.

We also have the issue about the Noerr-Pennington concern, the extent to which there is an application by any citizen to the government for redress of grievances, that that can't be a basis for liability.

If your concern is that you need to explain to the jury how Dr. Farone from Philip Morris person became a witness for the Plaintiffs in a lot of cases because they may want to do that very point on cross, that is a fair subject to talk about.

So let's see what the defense's concern is about that if at all.

MR. COFER: Well, I think it's context.
I understand the fact that the FDA contacted Dr.
Uydess was excluded during Dr. Uydess' deposition
or reading of this testimony.

I do think it's fair game for Mr. Gaylord to ask Dr. Farone were you contacted by a government agency with respect to your work at Philip Morris? The answer is yes. That is how you service to? Answer yes. I don't think we need to get into FDA regulations, hearings, Kessler, and all of that stuff. Of course, I will question motives and bias and all of that stuff.

THE COURT: And then there will be more opportunity on redirect to go back into motives and potential involvement, one side or the another.

But I tend to agree that it's better to soft peddle the FDA as a named agency and make the point, which I think can you fairly make euphemistically, that he didn't go to this controversy voluntarily. He was asked by a government agency or directed by a government agency to respond, if that is the truth. I don't know.

MR. GAYLORD: There may be one or two other contexts in which the phrase FDA is part of his testimony just because it has been some of the logic behind some of the positions taken by

1 the industry. 2 THE COURT: And I don't think lightening will strike if the word, letters FDA come out of 4 the witness's mouth, so long as they are not in the form of trying to bolster the witness's 5 6 opinion or to put some kind of approval on what's 7 going on. 8 But, as to the particular inquiry, how 9 did you get involved in tobacco litigation? A 10 government agency subpoenaed me and I became 11 known to the world as a good way to get started. 12 Without there being a lot of particular reference 13 to the proceeding or the number of hearings and 14 all of that. 15 MR. COFER: And just so Your Honor knows 16 what's coming, what the sort of questions they 17 will ask and the sort of testimony they will 18 elicit is Philip Morris did or didn't do 19 something because they were concerned about FDA 20 regulations? And that comes up, that is fine. 21 I'm happy to discuss that with him. THE COURT: It already has. 22 23 MR. COFER: Right. 24 THE COURT: Okay. Two minutes. 25 MR. GAYLORD: I think we have learned

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that the reader for the answers to Mr. Merryman's
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     deposition questions is unavailable tomorrow, and
     we are down to what we think is the last 15
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 4
     minutes of that.
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             MR. THOMAS: Correct.
             THE COURT: So you want to put your
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     former newscaster back on?
             MR. GAYLORD: Thinking that it will not
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     upset the overall schedule of Dr. Farone's
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     availability, we may do that now.
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             THE COURT: It's your case. It's your
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     offer of proof. You have got the witnesses here
     on meters, and, whatever works, works for me.
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             Okay. Doctor, if you will step down for
15
      just a bit.
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             In two minutes, we are bringing in the
17
      jury whether you are here or not. Okay.
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19 (Whereupon, after a brief recess, the proceedings
20 continued, in the presence of the jury, as follows:)
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                          * * *
22
             THE COURT: The jury, please.
23
             Good morning, jurors.
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             JURORS: Good morning.
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             THE COURT: We have been working outside
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your presence since 8:30. I regret that you have had to wait as long as you have, but we just had to get some things resolved, and they are now resolved.

You'll see Mr. Hartman is back on the stand. He was reading the testimony of witness Merryman when we concluded yesterday. I'm told there's only about 15 minutes more of that reading. So, we are going to finish that up before the Plaintiff's next witness is called.

Mr. Thomas.

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## WALKER MERRYMAN

was thereupon called as a witness on behalf of the 15 Plaintiff, in the form of previous testimony, read 16 into the record by a reader on the witness stand, 17 giving answers to questions posed by counsel, as 18 follows:

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## 64 DIRECT EXAMINATION 1 2 3 BY MR. THOMAS: Q. Can you direct your attention, please, to 5 what is marked in this trial as Plaintiff's Exhibit 28. This is a report on a visit to the United 7 States and Canada, April 17th to May 12th, 1958, by 8 Mr. Bently, Felton & Reid of B.A.T. Company Ltd. 9 A. All right. 10 This is four years after the Frank Ο. 11 Statement; correct? 12 A. Yes, sir. Q. Have you seen this document before? 13 14 A. I saw it recently because you or your 15 colleagues indicated that you wanted to ask me 16 about it. I -- I -- I looked it over briefly. Q. So, a lawyer showed it to you because we

20 A. Yes, sir.

19 about this document; right?

Q. First time you saw that document?

18 gave them notice that we were going to ask you

- 22 A. I may have seen it in my deposition last
- 23 year.
- Q. Okay. Now we go to the itinerary page.
  Now you see that these individuals

- visited with a number of companies and institutions
  during this trip in 1958; correct?
- A. That is what it indicates.
- Q. And is one an American tobacco company which is and has been at times one of your member companies; correct?
- 7 A. American has been a member, yes.
- 8 Q. Okay. And you see Mr. Hanmer and
- 9 Mr. Harlan and Mr. Harlow there; correct?
- 10 A. Correct.
- 11 Q. Philip Morris and another member company;
- 12 correct?
- 13 A. Yes, sir.
- Q. Do you know what positions Mr. O'Keefe or
- 15 Mr. Seligman held?
- 16 A. No, sir, I do not.
- 17 Q. Okay. A. D. Little, do you know what
- 18 that is?
- 19 A. I believe it's a research --
- MR. DUMAS: Hold it, counsel. Counsel,
- 21 that is out. It stops right there.
- MR. THOMAS: Show me where you want me to
- 23 start. Okay.
- 24 BY MR. THOMAS:
- Q. Okay. And TIRC, you know what that is?

- 1 A. I'm sorry. You are going to have to show
- 2 me where you jumped to.
- Q. That is a yes, sir.
- 4 A. Yes, sir.
  - Q. And what is that, sir?
- 6 A. Tobacco Industry Research Committee.
- 7 Q. Okay. And that became CTR?
- 8 A. It did, yes, sir.
- 9 Q. Roswell Park Memorial Institutue, Yale
- 10 University Biological Research Institute, Roscoe
- 11 Jackson Laboratory, do you know any of those
- 12 institutions?

- 13 A. I have heard of some of them, yes.
- 14 Others I'm not familiar with.
- 15 Q. The Industrial -- or excuse me. The
- 16 Industrial Technical Committee of TIRC, are you
- 17 familiar with that organization?
- 18 A. No, sir.
- 19 Q. Do you I know it's part of TIRC or was at
- 20 that time?
- 21 A. Well, that's what it says. I wasn't
- 22 familiar with it.
- Q. National Cancer Institute, you heard of
- 24 that organization?
- 25 A. Yes, sir.

- 1 Q. Johns Hopkins Hospital, you have heard of
- 2 that?
  - A. I have.
- 4 Q. New York University, you have heard of
- 5 that?
- 6 A. Yes, sir.
- 7 Q. And Sloan-Kettering, you've heard of
- 8 that?
- 9 A. Yes, sir.
- 10 Q. And TIRC in New York, you've certainly
- 11 heard of Dr. Little; correct?
- 12 A. Yes, sir, I have heard of Dr. Little.
- Q. And you have heard of the Scientific
- 14 Advisory Board of the TIRC; haven't you?
- 15 A. Yes, sir.
- 16 Q. Do you see at the top that these
- 17 individuals report they were seeking information on 18 certain questions?
- 19 A. That is what it says.
- Q. Okay. And one of the questions was the
- 21 extent to which it is accepted that cigarette smoke
- 22 causes lung cancer. Do you see that?
- 23 A. "Causes," in quotes, as if to set it off,
- 24 yes, sir.
- Q. Okay. Well, does the quotes mean

1 something to you?

- 2 A. I don't know. It's the only thing I see 3 there that is set off that way so --
- Q. Okay. Now, if you go down to the first paragraph, it states "With one exception, (H.S.N. Greene)" And Mr. Greene was at Yale University correct?
  - A. I believe he was. Yes, sir.
- 9 Q. Okay. "With one exception, the 10 individuals who we met believe that smoking causes 11 lung cancer if by, quote, 'causation,' end quote, 12 we mean any chain of events which leads finally to 13 lung cancer and which involves smoking as an 14 indispensable link." End quote.
- Now, he doesn't -- or the authors of this report don't exclude any of these other individuals as exceptions to that statement, do they?
- 18 A. They do not.
- 19 Q. Can you turn to Page 8?
- Do you remember, sir, that when we were
- 21 talking about statistical association you said
- 22 there are factors that are taken into account,
- 23 although you don't know how they are taken into
- 24 account when you look at statistical associations
- 25 in making a decision whether or not there's a cause

- 1 and effect relationship or not, do you remember
  2 that?
- A. I believe I said that I was aware some people believed those are important to consider, yes, sir.
- 6 Q. Okay. That was the consistency of the 7 association, the strength, et cetera; right?
  - A. And the others you mentioned, yes, sir.
  - Q. Now, in the conclusions here --Bill I need --

8

9

10 Bill I need -11 Now, in the conclusions here, do these
12 gentlemen report, after meeting with all of those
13 individuals in America and Canada, No. 1,
14 "Although," quote, "Although there remains some
15 doubt as to the proportion of the total lung cancer
16 mortality which can fairly be attributed to
17 smoking, scientific opinion in the U.S.A. does not
18 now seriously doubt that the statistical

- 19 correlation is real and reflects cause and effect
  20 relationship."
  21 A. You have read that accurately, yes, sir.
- Q. Did anyone in the tobacco companies, American, Philip Morris, Liggett & Myers, ever tell you about this from the time you started with the Tobacco Institute in 1976 right up to the present

1 time?

- A. I have not been made aware of this internal document from British American Tobacco, a no, sir.
- 5 Q. Have you ever though of asking them that 6 question?
  - A. No, sir.
- 8 Q. If 800,000 people were alleged to die as 9 a result of smoking, would you have asked the 10 question then?
- 11 A. No, sir, because I think absent any new 12 scientific information, there isn't any reason for 13 that position to change.
- Q. So, it would make no difference what the medical community said as to how many people died; you wouldn't ask the question?
- 17 A. Well, that's not exactly what I said. I 18 said that absent any new scientific break through 19 or information, I don't -- I don't think the policy 20 would change, but then I'm not in a position of 21 making policy either.
- Q. Well, what type of scientific break through information do you need, Mr. Merryman, to ask the question?
- 25 A. I need to rely on science really to ask

- 1 questions. I need to rely on science, for example, 2 to demonstrate how a normally normal healthy cell 3 suddenly becomes malignant. We don't know that, as 4 I understand it from the scientific community.
- 5 Q. Well, do you know of any reputable 6 medical organization in this country, well, let's 7 start there, which has not stated that cigarette 8 smoking causes lung cancer and other diseases? Do 9 you know of any reputable medical organization?
  - A. I do not.

- 11 Q. The only organization that so states 12 today is the Tobacco Industry, isn't that right, 13 sir?
- 14 A. I don't know if we are the only 15 organization that makes that statement; however, 16 clearly we do make that statement. And I think we 17 have support for it in the scientific literature.
- 18 Q. You can find one article to say anything 19 in the scientific literature, couldn't you?
- 20 A. I suggest there's more than one article 21 that bears on this controversy, sir.
- Q. Can you think -- oh, so it is a controversy? Is that what you are saying?
- A. Oh, yes, sir.
- Q. Okay. Can you name one organization,

- 1 forget whether it's a medical organization, one
- 2 other organization other than the Tobacco Industry
- 3 which says smoking doesn't cause disease?
- A. Well, that's not what we say. We don't
- 5 so say smoking doesn't cause disease. What we say
- 6 is there's a statistical association between
- 7 smoking and disease. We don't know if it's a
- 8 casual relationship.

- Q. That's --
- 10 A. To answer your question directly, I don't
- 11 know who else takes that position, but we certainly 12 do.
- 13 Q. Well, haven't you searched around to see
- 14 if you have any allies to support this controversy
- 15 that you're talking, haven't you done that?
- 16 A. As I said, our position, I think, is
- 17 amply supported in the scientific literature. The
- 18 positions we take certainly do have support there.
- 19 Q. Mr --
- 20 A. Whether or not we have allies, as you put
- 21 it, I don't know that we do.
- Q. Not one, do you, sir? Not one that you
- 23 can name; isn't that right?
- 24 A. We don't have organizations outside the
- 25 tobacco industry that support our position, if that

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1 is your question.
      Q. Not a single one in the world, do you?
3
        A. I'm not aware of any.
4
            MR. DUMAS: Mr. Thomas, that concludes
5
    it?
             MR. THOMAS: I believe so.
6
7
             MR. DUMAS: Thank you.
8
9
                   CROSS-EXAMINATION
10
11 BY MR. DUMAS:
12
      Q. Now, during the course of your career
13 from 1976 up to --
14
            MR. HARTMAN: I'm sorry. You are going
15
     to have show me where you are starting from.
16
            MR. DUMAS: 2696. 2696, Line 6.
17
             MR. THOMAS: Good morning, Mr. Merryman.
18 How do you start? Where are you?
19
             MR. DUMAS: 3349, Mr. Thomas.
             MR. THOMAS: Yeah.
20
21
             MR. DUMAS: Okay.
22
            THE COURT: Ask the question again,
23
    please, Mr. Dumas.
24
            MR. DUMAS: I have got to find it, Your
25
    Honor. We are starting over again. Okay.
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- 1 Volume 17, 3349, line 9.
- 2 BY MR. DUMAS:
- Q. Good morning, Mr. Merryman.
- A. Good morning.
- 5 Q. Let me ask you first, Mr. Merryman, to
- 6 tell us a little bit about your background. Where
- 7 you are from and where did you grow up?
- 8 A. I was born in and grew up in Rapid City,
- 9 South Dakota, spent all of my informative years
- 10 there, went to high school there, graduated from
- 11 Rapid City Central High School. My mother still
- 12 lives there.
- 13 Q. And what did you do after you graduated
- 14 from high school?
- 15 A. I attended college in Beloit, Wisconsin,
- 16 for a year, and transferred to Emerson College in
- 17 Boston following that.
- 18 Q. Did you graduate from Emerson?
- 19 A. Yes, I did.
- 20 Q. What kind --
- 21 A. In 1971.
- Q. What kind of degree did you receive?
- 23 A. I received a Batchelor's degree in mass
- 24 communications.
- Q. And that was 1971, you said?

- 1 A. Yes, it was.
- Q. After you graduated in 1997, what did you do?
- A. I returned to Rapid City to work for a cable television system in their news division, starting up their news department. One of the first cable systems in the country, as I recall, to do any significant amount of news in local public affairs program.
- 10 Q. And how long did you hold that job?
- 11 A. I was there for a little less than a 12 year.
- Q. What did you do next?
- 14 A. Following that, I went to Sue City, Iowa, 15 where I was employed by the NBC television 16 affiliate there to write and produce and anchor 17 newscasts and do reporting.
  - Q. And how long did you hold that position?
- 19 A. I was there for a little less than a 20 year.
- Q. Ad what came next?

- 22 A. After that, I took a job as news director
- 23 at the Nebraska Television Network in Carney,
- 24 Nebraska, which was a commercial network of four
- 25 television stations that covered predominantly

- 1 rural areas of Nebraska, Kansas and Colorado.
- Q. And how long were you in Carney,
- 3 Nebraska?
- A. From approximately November 1972 to early 5 1976.
- 6 Q. So about four years?
- 7 A. A little less than that, yes.
- 8 Q. And you left Carney in 1976; is that
- 9 right?
- 10 A. That's correct.
- 11 Q. And what position did you take then?
- 12 A. That is when the Tobacco Institute
- 13 offered me a position as assistant to the President 14 of the institute.
- 15 Q. So, you moved to Washington in 1976 then?
- 16 A. Yes, sir, I did.
- 17 O. Is it fair to describe the five years
- 18 that you spent before you went to the Tobacco
- 19 Institute as a broadcast journalist?
- 20 A. That is correct, yes, sir.
- Q. Now, tell us how is it that you came
- 22 about to take a position with the Tobacco
- 23 Institute?
- 24 A. Well, I became aware of their interest in
- 25 hiring someone who was familiar with broadcasting

- and journalism. A friend of mine who ran a job
  placement service for the Radio and Television News
  Directors Association told me of the position. I
  applied for it. And they asked for a substantial
  amount of background material on me, which I
  submitted, and went to Washington then for a
  personal interview. Subsequently, I was hired.
  - Q. And what were you hired to do?

- 9 A. I was hired to respond to inquiries from 10 the news media about issues that the Tobacco 11 Institute addressed on behalf its member companies.
- 12 Q. What kind of media inquiries were you 13 responding to?
- A. Well, typically, a reporter would call
  and ask for information on tobacco economics,
  tobacco history, taxation, smoking bans, smoke and
  health also on occasion. We responded, if we
  could, if we had the information to those questions
  and were in a position of being the spokesman for
  the industry on those issues on which there was a
  common position.
- Q. How did you -- what was the title that you had when you first went to work for TI?
  - A. Assistant to the President, sir.
- Q. And how did you go about responding to

- 78 1 inquiries? What physically did you do? A. Well, we had information at the institute 3 in published form that we referred to, position 4 papers. In terms of economic information, we would gather that from sources such as the U.S. Department of Agriculture. 7 MR. DUMAS: Hold it. Hold it. Hold it. 8 Stop after agriculture. 9 MR. HARTMAN: Sorry. Okay. 10 MR. DUMAS: Go on to the next sentence. 11 MR. HARTMAN: Beginning "we had 12 certainly"? MR. DUMAS: Yes. 13 14 Α. We would certainly review material that 15 came to us in subscription form; for example, 16 magazines and newspapers. So that we had as much 17 information as we could gather on those issues, and 18 also obviously we got a lot of information from our 19 member companies.
- Q. Did you, during this time that you were Assistant to the President, did you do things other than respond to inquiries from the media?
- A. Yes, sir. Occasionally I would pitch in to help write a news release. I would write -sometimes I would write speeches for myself. I

- 1 don't think I wrote speeches for anybody else. We
- 2 were asked on occasion to give speeches to civic
- 3 clubs like Kiwanis Clubs and Lions Clubs. Also
- 4 sometimes tobacco trade magazines would ask us to
- 5 write an article on a current issue in a magazine, 6 and sometimes I would do that.
- 7 Q. How long did you hold this position of 8 Assistant to the President?
  - A. In approximately 1980 or '81.
- 10 Q. And would you tell the jury what position 11 you took up next?
- 12 A. After that, I was offered a position of 13 Director of Communications at the Institute.
  - Q. And what year was that?
  - A. 1980 or '81, I believe.

14

- 16 Q. And did your job responsibilities change 17 when you became Director of Communications?
- 18 A. Yes, sir, they did. They were expanded 19 quite a bit.
- Q. And how were they expanded?
- 21 A. To include some administrative duties to
- 22 oversee the activities of three other people that
- 23 would act as spokesman for the institute to the
- 24 industry, and also a support staff of two people.
- Q. How long were you Director of

- 1 Communications?
- A. For approximately two years.
- 3 Q. Then what position did you take?
- 4 A. Then I was offered the position of Vice
- 5 President of the Tobacco Institute, which I took.
- Q. And did your responsibilities change when you became a Vice President?
  - A. Not materially, no, sir.
- 9 Q. And is that the job that you have today?
- 10 A. Yes, sir, it is.
- 11 Q. So you have had essentially the same
- 12 position for the past 15 years approximately?
- 13 A. Yes, that's right.
- Q. Are you a part of a particular unit of
- 15 the Tobacco Institute?
- 16 A. I'm part of the public affairs division.
- 17 Q. Public affairs division?
- 18 A. Yes, sir.
- 19 Q. And is there anyone in that division to
- 20 whom you report or are you the head of it? That
- 21 is, what is -- how does that operate?
- 22 A. The public affairs division is headed by
- 23 a senior vice president whose name is Walter
- 24 Woodson.

Q. Can you tell us a little bit about the

1 organization of the Tobacco Institute? Are there 2 divisions other than the public affairs division?

- A. Yes, sir there are.
  - Q. What are they?

- A. There are three other divisions. One is the administrative division, which takes care of things like payroll and personnel and computers.

  There is our state activities division, which oversees our efforts to monitor legislative and regulatory activity of the state and local level.

  Then there's our federal relations division which oversees our activities at the federal level with
- 13 respect to Congress and federal agencies. 14 Q. What does the state activities division 15 do?
- A. The state activities oversees our
  activity at the state and local level. We have
  obviously a lot of concerns with respect to
  legislation and regulatory regulations in the 50
  states. A lot of legislators are in session right
  now. We have contract lobbyists who report to
  various regional vice presidents who represent the
  Tobacco Institute in Minnesota and other states.
- Q. When you joined the Tobacco Institute, box many employees did it have?

- 1 A. I believe there were approximately 30 2 employees at the time, sir.
- Q. And how many does it have today?
- A. Somewhere around 50 or 54 employees, I believe.
- 6 Q. How many are there in the public affairs 7 division, your division?
- 8 A. The division which I'm employed, I 9 believe there are a dozen.
- 10 Q. Who supports the Tobacco Institute; that 11 is, provides the funding for the organization?
- 12 A. Our funding comes entirely from our
- 13 members which are the cigarette manufacturers,
- 14 manufacturers of tobacco products.
- 15 Q. Let me first ask you what this document 16 is, PA000341?
- 17 A. This is a document which, as it says,
- 18 it's the scope and activities of the Tobacco
- 19 Institute. It describes the general terms, what
- 20 the Tobacco Institute does.
- 21 Q. And what was the purpose for which this
- 22 document was prepared?
- 23 A. We wanted to give people who were
- 24 interested in knowing something about the institute
- 25 a general overview of our activities.

- 83 Q. As an general overview, does it 2 accurately state what the Tobacco Institute does 3 and doesn't do? Α. It does, sir. 5 Now, how does it accomplish that aim, 6 that aim or that function of the institute, to 7 foster public understanding? How does it do that? MR. HARTMAN: I'm sorry. You moved. 8 9 MR. DUMAS: I did. Down about two 10 paragraphs. I'll reread the question. 11 BY MR. DUMAS: Q. Now, how does it accomplish that, that 12 aim or that function, the aim of the institute, to 13 14 foster public understanding? How does it do that? 15 A. We have a variety of publications that we 16 make available to the news media and the general 17 public on issues that the Tobacco Institute takes a
- 19 We also have, as I mentioned a moment 20 ago, people like me who act as spokesman for the institute for the industry who are available to 21 22 talk to the news media or talk to public groups 23 upon invitation.
- 24 We occasionally have films on 25 agriculture, for example, to give people an

18 policy or position on.

1 overview of what the tobacco agriculture and 2 history is like. And we also maintain documents for our 4 own use in researching some of those issues. Q. Do you, in your job, have occasion to 5 6 talk with and meet with people who work for other 7 trade organizations? 8 A. Yes, sir, I do. 9 Q. Do you exchange ideas and have 10 conferences and that sort of thing? A. Yes, sir, both formally and informally, 11 12 we do. Page 3380, 20 pages ahead. 13 Q. 14 MR. THOMAS: That is the extent of ours. 15 MR. DUMAS: Ray. MR. THOMAS: Okay. 16 17 MR. DUMAS: Do you have that in front of 18 you, Mr. Hartman? 19 MR. HARTMAN: Bottom of the page? 20 MR. DUMAS: Yes. Okay. 21 BY MR. DUMAS: 22 Q. Question: Now, Mr. Ciresi asked you a 23 number of questions about the Tobacco Institute's 24 public statements with regards to smoking and 25 health. Do you remember those questions?

- 1 A. Yes, sir.
- Q. Does the Tobacco Institute today in 1998 issue press releases or publications dealing with smoking and health?
  - A. No, sir, we don't.
- 6 Q. How --

- When did you stop doing that?
- 8 A. Well, I think the last time I recall we 9 issued anything was in the late 1980s.
- 10 Q. You would still respond to inquiries from 11 people about the institute's position, if they 12 asked; is that right?
- 13 A. Yes, sir. If a reporter called and asked 14 for our opinion on a smoking and health issue, if 15 it was something I could respond to, I would.
- 16 Q. But you don't prepare and issue our own 17 press releases or public statements, and you 18 haven't for several years; is that right?
- 19 A. That's correct.
- Q. And why is that? Why don't you do it any more?
- A. Well, it seemed that there was less and less interest in the subject as the American public believed that smoking caused disease. MR. DUMAS: Thank you.

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THE COURT: That concludes the reading,
1
2
    Mr. Dumas?
3
             MR. DUMAS: Yes.
             THE COURT: Thank you.
 4
5
             Thank you, Mr. Hartman.
             All right. Mr. Gaylord, Plaintiff's next
6
7
    witness.
             MR. GAYLORD: Thank you, Your Honor.
8
9
             We call Dr. William Farone.
10
             THE COURT: Thank you, sir.
11
             Would you step to the witness chair?
     I'll administer the oath, since the clerk stepped
12
13
14
15
                WILLIAM A. FARONE, PH.D.
16 was thereupon called as a witness on behalf of the
17 Plaintiff and, having been first duly sworn, was
18 examined and testified as follows:
19
             THE COURT: Have a seat, please. Tell us
20
    your full name. Spell the first and the last.
21
             THE WITNESS: William Anthony Farone,
22
23 W-i-l-l-i-a-m F-a-r-o-n-e.
24
             THE COURT: Thank you.
25
             Mr. Gaylord.
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MR. GAYLORD: I abbreviated your first
name, as I'm used to doing, Dr. Farone. I just
wanted to have your name in front of the jury so
it would register better than just hearing it.

DIRECT EXAMINATION

BY MR. GAYLORD:
Q. Let me begin by getting the jury a chance
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9 Q. Let me begin by getting the jury a chance 10 to learn a little bit about who you are in the 11 context of this case. And let's start with a quick 12 overview of your qualifications.

I have called you Dr. Farone. Tell the jury what kind of a doctor you are, sir?

- 15 A. I have a doctor of philosophy in 16 chemistry.
  - Q. And that is a Ph.D.?
- 18 A. Ph.D.

- 19 Q. And you are a life-long scientists?
- 20 A. Probably more true in my case than some, 21 yes. I think I have studied science since I was
- 21 yes. I think I have studied science since 22 about nine years old.
- Q. And we are going to talk, as we go, about your qualifications to call yourself a scientist,
- 25 about your qualifications that are specific to the

1 issues in this kind of a case. So, let's explain to the jury that you 3 have a particularly relevant experience to a case 4 involving Philip Morris. Summarize for the jury your involvement with Philip Morris? A. I was recruited by Philip Morris in 19 --7 the late part of 1975, and I joined them in 1976. 8 And for the first year that I worked at 9 Philip Morris I reported to the vice president of 10 research and development, Dr. Robert Seligman. And during that first year I was charged 11 12 with the responsibility of learning as much as I 13 could about everything that Philip Morris did, how they made cigarettes, how they tested them. 14 15 The reason I was hired was for two 16 reasons. One was to help them diversify into other 17 businesses. There was a recognition at the time 18 that there was the potential for diminishing sales of cigarettes, due to people's health concerns, and 19 20 they were interested in diversification. And the other part of the challenge that 21 22 I accepted was the concept of making a safer 23 product, one that would cause less disease. 24 So, the first year I learned about 25 everything that I could, and then after about a

- 1 year I was promoted to the position of director of
  2 applied research where I supervised a large number
  3 of people of different disciplines, and I held that
  4 position for seven years.
- Q. And we'll come back and talk much more about that, but just to kind of again shine a little bit of light on the end of where we are going, and then we'll come back and get there more methodically, you are here in part to share with us a good deal of information from a sort of a in-house view of Philip Morris and its cigarette products and research about those subjects. That is one thing we are going to talk about, is it not?
  - A. That's correct.

- Q. And then I think you have agreed to share with us some opinions and observations about Philip Morris' conduct with respect to its cigarette products and its customers and views as a scientist and business person about how that fits into the issues in this case?
  - A. That's correct.
- Q. That is kind of where we are going today.
  All right. Let's back up then and go a
  little bit further into the subject of your
- 25 qualifications to call yourself as a scientist and

1 a chemist. And tell the jury what are the stops 3 along the way that give you that qualification and 4 credentials? A. I graduated -- I'll start with high 5 6 school, I guess, 1957, North Syracuse High School, 7 second in my class, and that earned me a 8 scholarship to Clarkson University. 9 Q. That is Syracuse, New York? 10 Α. Yes. 11 Go ahead? Q. Well, actually, it was North Syracuse 12 Α. 13 Central High School, but near Syracuse. 14 And I went to Clarkson University, where 15 I had a major in chemistry, and I did minor in 16 electrical engineering and chemical engineering. And I graduated in 1961 and immediately 18 started my Ph.D. program. 19 And during my undergraduate program, I 20 did a senior thesis in synthetic organic chemistry and studied natural product chemistry, which 21 22 includes things like nicotine and tobacco and other 23 kinds of alkaloids. Nicotine is an alkaloid. And 24 other types of similar kinds of drugs.

In 1962 I completed my Master's degree in

1 chemistry, was awarded a degree in 1963, went on 2 and got my Ph.D. Finished that work in '64. 3 awarded my Ph.D. in '65. Between '64 and '65, I worked for the 5 Department of Defense. And in 1965 I became Associate Professor 7 of Chemistry at Virginia State University, 8 Petersburg, Virginia. I was there for two years. 9 Then I joined Leve Brothers Company. 10 Lever Brothers Company is the manufacturer of many 11 consumer products like Close-Up Toothpaste, Aim Toothpaste, Whisk Laundry Detergent, All Detergent, 12 13 Dove bar soap, Caress, and so on. A very wide 14 range of products. 15 I was involved in their new product area 16 at the beginning of my tenure there. And then I 17 became their director of scientific research 18 responsible for all of the R&D on all of those 19 products. 20 In 1975 I joined a company called Pacific 21 Vegetable Oil Incorporated, PVO International. It 22 was a manufacture of products used in foods that 23 are related to oils and fats and things of that 24 type.

25

And from there I joined Philip Morris,

- 1 and, as I indicated, in 1976.
- Q. Okay. Let me just exercise my curiosity about a couple of those things you have told us.
- 4 Clarkson University is a well-recognized 5 respected university in Upstate New York?
  - A. That's correct.

- 7 Q. You completed your degree programs there.
- 8 And you said you went to work for the Defense9 Department.
- 10 Give us a short easy way to tell us the 11 general nature of the work you did there?
- 12 A. Yes. My work was in alkaloid chemistry,
- 13 had to do with aerosol and things of that type.
- 14 And part of the work that I was involved in the
- 15 Defense Department, as well as when I taught
- 16 college, was in air pollution, the atmospheric
- 17 aerosol, the stuff that is in the air that we all
- 18 breath and that we see.
- 19 One of the interesting projects had to do
- 20 with measuring ozone profiles. Probably you have
- 21 heard about the interest in ozone now. Well that
- 22 goes back to rocket tests that were being made to
- 23 measure pollution due to ozone back in the early
- 24 '60s while I was at White Sands.
  - 5 Q. That is White Sands, Mexico?

- 1 A. Right.
- Q. You used a word aerosol. And I'm sure we'll hear more about that word. So why don't I have you explain it to the jury? It's a term we hear as lay people, but I suspect it has a technical meaning, as well.
- A. Aerosol is a system where you have tiny droplets in a gas. Normally, the one we are talking about is an aerosol where the droplets are liquid. They may have some solid materials dissolved in them. And in between these particles of liquid droplets, which can be very small, we have gas or air. And the chemical composition of the aerosol droplets can be different from the chemical composition of the air in gas.
- Q. I think because there is a lot of terminology that may come up, not by any means all of the words that you use, but for a few of them, I'm going to ask you to write the word so we can see it, and maybe it will register better when we hear it again. Will you write it, please?
- A. Aerosol. And if we think of aerosol as being different sized drops.
- Q. Now, you know what I'm going to have do? I'm going to have to have you out here because we

1 are getting down behind this thing. All right. THE COURT: Mr. Gaylord, it's perfectly fine to put the back of the witness to me. I 4 don't need to see the drawing. The jurors do. 5 MR. GAYLORD: I appreciate that. THE COURT: And if counsel can see it, 6 7 too. 8 MR. GAYLORD: Thank you, Your Honor. I'm 9 not sure exactly how to meet all of those 10 criteria, but just for -- let's go with this for 11 the moment. 12 THE WITNESS: Okay. So, we have these droplets, and they can 13 14 be caused by a lot of things. Like fog is an 15 aerosol. I have noticed some here. But the 16 tobacco smoke is also an aerosol. 17 While I was at Lever Brothers, products 18 like hair spray, things of that type, underarm 19 deodorant, those are all aerosols. 20 And the usual interest in aerosol is the 21 particle size distribution. That is how many 22 particles you have of different type. And also 23 what it's composed of. 24 So, there is a gas in between, and 25 there's droplets, which in most of the one of

interest are liquid droplets. And there can be 1 dissolved solids inside the liquid droplets.

Q. Now, Doctor, once again, I'm going to 4 interrupt where you are going with that. I think 5 aerosol is going to be a word we are going to hear more about. And this may be something that you'll expand on. But I sort of stepped off the track. 8 There's some things I need to do in terms of 9 completing your qualifications.

So you worked at White Sands, New Mexico 10 11 with the Defense Department on a subject that dealt 12 with aerosol as one of its aspects.

13 I haven't asked you and you haven't 14 really talked yet about your work in education. 15 You have been an educator of scientists?

- A. I was Associate Professor of Chemistry at 16 17 Virginia State University for two years.
- 18 Q. All right. And have you continued to 19 think of yourself as an educator of scientists 20 throughout your career?
- A. I have actually maintained some teaching 21 22 experience with national university, teaching night 23 school. And I have had students. For example, a 24 few years ago I had a student at the University of 25 California at Santa Barbara, even though my current

- 1 company I'm not teaching academic subjects anymore,
- 2 but I do help students on their Ph.D. or Master's
- 3 thesis by being what we call an outside advisor to 4 them.
- 5 Q. Now, you have, as a scientist, you had 6 occasion to contribute technical publications in
- 7 articles that were reviewed and accepted and
- 8 published and became part of the literature in your
- 9 areas of expertise?
- 10 A. Yes, I have. I don't know. I don't keep
- 11 the exact number, but somewhere around 50 technical
- 12 publications and patents.
- 13 Q. And you have patents of your own and have
- 14 been involved in patent work with companies, as
- 15 well?

- A. Yes, I have.
- 17 Q. The company you mentioned -- let's see
- 18 which one was first? Was Lever Brothers before
- 19 PVO?
- 20 A. Yes.
- Q. Okay. Let's talk about Lever Brothers
- 22 just for a moment again. You said that is a
- 23 company that makes many consumer products, and we
- 24 have heard of those.
- A. That's correct.

- 1 Q. And you spent how many years at Lever 2 Brothers?
- 3 A. 1967 to '75, eight years.
  - Q. Okay. And your final position there was?
    - A. Director of scientific research.
- 6 Q. Okay. And just as it sounds like, that
- 7 means you were in charge of that whole aspect of 8 the businesses?
- 9 A. I was in charge of the physical
- 10 chemistry, organic chemistry, toxicology, and that
- 11 included all of the safety testing. Microbiology,
- 12 which includes things like bacteria, molds, and
- 13 yeasts that might be in food products.
- 14 Biochemistry. All of the scientific.
- 15 Q. Now you have just named several different
- 16 kinds of scientists. And I didn't hear you say
- 17 that your Ph.D. includes all of those different
- 18 things?

- 19 A. Well, the discipline in which I studied,
- 20 keloid chemistry is one of the cross over
- 21 disciplines. We are actually technically referred
- 22 to as physical chemist which is a combination of
- 23 physics and chemistry.
- 24 And I guess the best way to explain it
- 25 was a very famous American scientists Gilbert

- Norton Lewis who once described physical chemistry as the science of everything that is interesting and it doesn't include anything that isn't interesting.
- And basically what you study is
  applicable to life processes. And it's applicable
  to wood or metal. It's a physical chemical basic
  thing. So that allows you to apply it to the life
  sciences.
- Because of that background I was selected at Lever to also be in charge of the life sciences.
- Q. And those various different disciplines of sciences that you mentioned at Lever Brothers, were those positions essentially -- do those titles represent positions that were occupied by other scientists who worked under your supervision while you were there?
- 18 A. Yes, they did. For example, in the 19 toxicology area, there would be the head person of 20 that division would be a toxicologist, and they 21 would have five or six toxicologist below them.
- There would be technicians who would do animal testing, pathology, things of that type.
- 24 And in analytical chemistry there might 25 be 50 analytical chemists who do chemical analysis

1 on products, and so on.

- Q. Okay. This part of your career that was at Lever Brothers, did you have an opportunity to work on either improvements or developments of new products that involved numerous consumer products that we have all heard of?
- A. Yes, I did. For example, I was involved when I first went there I wasn't director of research. I was a scientist and was involved in the product Close-Up Toothpaste, which people may be familiar with. It was the first silica-based toothpaste, made of little tiny particles of sand, actually. And the object was that this was considered to be superior to the jell toothpastes. So that became the basis for Aim toothpaste. Aim toothpaste is a drug, whereas Close-Up toothpaste at that point was considered not, because it contained fluoride.
- And so I was involved in actually the
  development of a product where that change was made
  of adding fluoride in clinical trials and going
  through all of the things with making sure that it
  was safe, making sure that it was effective.
  And similar with Promise margarine. You

25 may have heard of Promise margarine. We had

- 1 another margarine called Imperial margarine, and
- 2 because of the association between fat and
- 3 cholesterol and saturated fat in your diet and
- 4 cholesterol, we decided to make the highest
- 5 polyunsaturated margarine that we could. And that
- 6 turned out to be the Safflower product. And we had
- 7 to do the clinical trials on that to make sure that
- 8 we achieved cholesterol lowering. Some of it was
  9 pretty mundane.
- 10 You have probably all seen the Ring
- 11 Around the Collar commercial for Whisk. So,
- 12 sometimes your science is directed toward proving
  13 an advertising.
- Q. Okay. Proving that Whisk gets the ring out from the collar?
- 16 A. That's correct.
- 17 Q. Okay. Would it be fair to say that in
- 18 your career, including Lever Brothers, you have
- 19 functioned as a scientist but also as a manager?
- 20 A. Well, actually probably a manager. It's
- 21 difficult to define in a scientific discipline.
- 22 You work with people and they work for you. I
- 23 mean, it's sort of a two-way street.
- In my career, I have tried to maintain
- 25 what we call a hands-on involvement in the science.

- 1 So, I have continued to publish, and I look at the 2 people who work for me more as colleges than I do 3 as subordinates. And it's pretty competent 4 science, that don't have these very strict boss 5 subordinates relationships.
- Q. But while you were at Lever Brothers and working on some of these things, you mentioned like you were the guy that many of these other people were working for and reporting to. You probably weren't there with the beakers and Bunsen burners?
- 11 A. That's correct. I had 150 people 12 reporting to me at Lever I was responsible for. I 13 was the senior signatory for the company on all of 14 the applications and submissions to government 15 regulatory agencies. I really had the managers 16 reporting to me.
- Below them there was a project leader, who was reporting to managers, and then below them the scientists who actually did the work.
- 20 But I did also maintain my own 21 laboratory, and I also did my own hands-on work at 22 the same time.
- Q. All right. And in that kind of a program would you have developed and used a strong awareness of things like standards of

- 1 responsibility for a manufacturing company?
- A. Well, as a matter of fact, it's probably more severe than that. Because it was my name that was going on the approval list for everything we
- 5 did, so it was important that not only that I
- 6 understood the standards but I also understood the
- 7 criteria by which those regulations of all of those
- 8 different products were going to be interpreted.
- 9 We had to deal with the Environmental Protection
- 10 Agency, the Consumer Products Safety Commission,
- 11 the Food and Drug Administration, and various
- 12 state -- every state has their own safety people
- 13 for like foods and agricultural products, and we
- 14 had to deal with all of that.
- So we had a special staff of people that
- 16 would go to those meetings with those people all of 17 the time.
- 18 Q. From your experience there and your other
- 19 careers positions, are you a person who knows and 20 understands not only formalized codified standards
- 21 of behavior for products and companies, but also
- 22 what we might think of as the common law or
- 23 unwritten rules for why what is reasonable behavior
- 24 for companies?
- A. Well, there is in companies and there's

- 1 also in science, there's also a code of ethics for 2 science.
- 3 Q. And are all of those subjects within your 4 knowledge and experience?
  - A. Yes.

- 6 Q. From the education and from the work you 7 have done?
  - A. Yes, they have.
- 9 Q. We'll probably get to the application of 10 those parts of your expertise. You went from Lever 11 Brothers PVO, which you said was Pacific Vegetable 12 Oil?
- 13 A. That's correct.
- Q. Okay. Now, just because that name might suggest something fairly simple and low-tech, I'm going to ask you is that a correct impression or --
- 17 A. No, that is not a correct impression.
- 18 Oil or fat products are used in
- 19 production of a wide variety of materials, in
- 20 addition to foods. You know, for example, they are
- 21 used in paints. There's resins made from fats.
- 22 There is lubricants made from fats. There are
- 23 various kinds of esters that are used as food and
- 24 fragrance additives that are made from fat.
- So, although we were dealing with

- 1 vegetable oils and things of that type, it was
  2 really a chemical company where we were turning
  3 those kinds of products into other chemicals which
  4 had a wide variety of uses in foods, cosmetics,
  5 toiletries, industrial applications.
  6 Q. Now, I'm going to skip over Philip Morris
  7 for a moment in the chronology of your career
  8 because we are going to spend more time on that.
- 9 After you left Philip Morris, you 10 continued to work as a scientist and in the 11 industry?
- A. Yes. I have been president of two
  companies. The first one was called Advanced
  Scientific Applications, which was formed in 1984.

  And the major client we had there was Dean Wittier
  Reynolds at that time. Now Morgan, Stanley, Dean
  Wittier. That is an investment banking firm. And
  we were involved in helping them understand the
  various projects that they got involved in,
  involving things like wind energy, bio mass
  conversion. Things like ethanol production for
  alternative fuels.
- And in 1987 formed the current company of which I'm president and chief executive officer.

  It's called Applied Power Concepts, Inc. And it's

- 1 a -- we do three things. We develop new technology
  2 in energy, biochemistry, and chemistry. And the
  3 common thread is that the things that we're doing
  4 are intended to be environmentally more acceptable
  5 than the standard way of doing things. So, we
  6 develop, for example, chemicals that might replace
  7 insecticides that are harmful or chemicals that
  8 might replace biocides that are harmful or a
  9 cleaning agent. So they are all food-derived
  10 chemicals to replace chemicals that are being used.
  - Q. You said biocide. What's a biocide?

- A. A biocide kills bacteria, yeasts, molds.
  You could use to it clean your shower stall or a
  spray in a hospital, on a cleaning surface. And we
  have just developed and applied to the EPA for a
  product that does that. But within four hours it
  breaks down into things which are harmless.
- 18 Q. And you said food-derived products. And 19 I don't picture that you go down to the food court 20 and buy stuff and turn it into other kinds of 21 products. But tell us what that means?
- A. Well, the insecticide we developed is a sugar estrin. It is an ester of sucrose and fatty acid, and you put those together and you can spray it on an aphid or a wet fly and what happens is it

- 1 dewaxes them so they essentially dry out and die.
- 2 But on the other hand it's something you can eat
- 3 because it's just sugar and fat. So, if you eat
- 4 it, it's okay -- not the fly.
- And so, for example, the hard surface
- 6 cleaning agent that we have, that kills the
- 7 bacteria, the yeast and the mold, but when you put
- 8 it into water it's only got about four hours before
- 9 it breaks into two pieces, one of which is a thing
- 10 called glycine B-tain, which is a byproduct of
- 11 sugar beet and which is what we start with, and the
- 12 other is another fatty acid driver.
- So, it's pretty simple, the idea to take
- 14 these things which are less harmful, put them
- 15 together and make something replacing something
- 16 that is harmful.

- Q. Where is your current home and business?
- 18 A. My home is in Irvine, California. The
- 19 business is in Orange, California, about five
- 20 minutes from Disneyland.
- 21 Q. And that is a going concern and keeps you
- 22 busy and would keep you plenty busy without having
- 23 to be in places like this doing things like this?
- A. That's correct.
- Q. Let me then go back and now talk about

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1 Philip Morris and your involvement there, and --
             THE COURT: Mr. Gaylord.
             MR. GAYLORD: Yes.
4
             THE COURT: Can I interrupt? We are
5
     going to need a morning recess, particularly for
6
     the reporter who's been going since 8:30.
7
             MR. GAYLORD: Sure.
8
             THE COURT: At any point, before you get
9
     into something where you are going to be going
10
     with the same topic for awhile.
11
             MR. GAYLORD: We are about to do that,
12
     and maybe this would be just as good as any.
             THE COURT: Jurors, 15 minutes, please.
13
14
                          * * *
15
    (Whereupon, after the jury exited the courtroom,
16
        the proceedings continued, as follows:)
17
             THE COURT: Thank you.
18
19
             Anything for the record for the
20
     Plaintiffs?
21
             MR. GAYLORD: No, Your Honor.
22
             THE COURT: Mr. Cofer.
23
             MR. COFER: Yes, Your Honor.
24
             If Dr. Farone intends to offer opinions
25
    on the common law of business ethics, I'm going
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to want to object to that, and I don't know how 1 Your Honor would like to take that up, whether that is something we should do when and if that 3 4 happens or whether you would prefer to deal with 5 that in advance. 6 And the basis of my objections would be 7 to lack of foundation, it invades the province of 8 the jury, and it's not a proper subject of expert 9 testimony. 10 THE COURT: Go ahead. Are we going 11 there? 12 MR. GAYLORD: Well, I think we are going 13 to ask this person at some point what he opines 14 about the standard of reasonable care for a 15 company manufacturing consumer products. If that isn't a subject for expert testimony, I'm going 16 17 to throw away my set of Oregon Reports. 18 THE COURT: Go ahead, Mr. Cofer. MR. COFER: Well, I would tell him to 19 20 start tossing them --THE COURT: Oh, now, come on, both of 21 22 you. It's all right. I just, you know, I know 23 he started and you finished, but let's not go

MR. COFER: It's the sixth grade boy

24

25

there. Okay.

1 thing. 2 THE COURT: I'm not going to be a 3 teacher. So let's just say to the merits. 4 MR. COFER: That is for the jury to 5 decide. In fact, one of the ultimate issues in 6 this case is whether Philip Morris departed from the ordinary standard of care, whether it acted 7 8 as a reasonable manufacturer. 9 A chemist, who is a former employee at 10 Philip Morris, is not qualified to render that 11 opinion. I'm not sure that anyone is qualified 12 to render that opinion. 13 Perhaps if there was some business 14 ethicist who established there was some sort of 15 protocol recognized within the particular 16 community could set out the different standards, 17 why they were recognized, that could be subject 18 to cross-examination perhaps, and give that 19 opinion, but for someone just to come in and say: 20 I'm a business person; I'm as a scientist; I used 21 to work at Philip Morris; in my opinion, they 22 departed from the reason and standard of care. 23 That invades the province of the jury. 24 This person is not qualified to give that 25 opinion. And it's not the proper subject of

1 expert testimony. THE COURT: Well, let me start with the last conclusion because I think that is a 3 4 conclusion I can't draw yet, and I'll want to 5 hear the foundation laid. 6 It's not at all unusual that expert 7 witnesses offer opinions about the standard of care in a particular field relative to a claim 8 for negligence. The most observe one, obviously, 9 10 is in the area of medicine where jurors are being 11 asked to determine whether a defendant 12 physician's conduct fell below the standard of 13 care. That is what negligence is. They need 14 help to do that. 15 And it is helpful to the trier of fact 16 when someone qualified who is familiar with the 17 standard of care states what that standard is. 18 And then often it is then asked of such a 19 witness whether the assumed conduct of the defendant physician fell below that standard. 20 21 Indeed, a plaintiff can't get to a jury 22 in a medical malpractice case, at least in our 23 state, without that kind of prime facie evidence. 24 There is a claim in this case that Philip 25 Morris's conduct was negligent. There is going

to have to be some evidence about the standard of care of a reasonably careful cigarette manufacturer relative to those claims of negligence.

Whether this witness is qualified to offer an opinion about that standard of care depends upon the foundation laid. And, obviously, we haven't gotten there yet.

But I can't say that just preemptively that kind of opinion evidence invades the province of a jury or is not the proper subject of expert testimony because it often is.

In many areas, a car A-car B case, where jurors are familiar with the rules of the road, they don't need an expert witness to tell them what conduct is reasonable or what is a lack of due care.

But in a case like this, I suspect they are going to need some reference beyond their own experience about what is the conduct of a reasonably careful cigarette manufacturer and what conduct falls below that, in order to create an issue of fact.

So, it's appropriate for the Plaintiff to lay that foundation. I'm not going to require it

to happen outside the presence of the jury. 1 2 When you are ready to make your 3 objection, let me know, and we'll take discussion 4 behind the jury's doors, that is, to say, into 5 chambers, and we'll finish the record there. 6 But I don't see a reason not to allow it. 7 They need to have an opportunity to try to make 8 their case. 9 MR. COFER: I wanted to flag the issue 10 for the Court. 11 THE COURT: No, I appreciate that. MR. COFER: And I'll make the appropriate 12 13 objection. 14 THE COURT: Okay. Were you rising also? 15 I saw some body language? 16 MR. DUMAS: I think I was going to, but I 17 don't think that is necessary at this point in 18 time. THE COURT: Okay. I just wanted to make 19 20 sure everybody said what they need to say for 21 22 15 minutes, please. 23 \* \* \* 24 (Whereupon, after a recess, the proceedings 25 continued in open court, in the presence

of the jury, as follows:) 1 2 THE COURT: Jurors, assuming there's no 3 4 problem for you, we are going to go until about 12:15. All right. Okay. Sounds good. 5 6 Mr. Gaylord. 7 MR. GAYLORD: Thank you, Your Honor. 8 BY MR. GAYLORD: 9 Q. Dr. Farone, to sort of overcome this 10 problem of something for you to write on, when that 11 is appropriate, and not have it be blocking the 12 place have where you sit in the witness box, I'm 13 going you have you, when we get to that, to use the 14 door presenter, and if the jury can see it on the 15 TV when that's appropriate. There we were. 16 Let's -- we are just about to move into a 17 little more detailed expression of your career at 18 Philip Morris. You told us earlier something about 19 how it happened that you went there. But will you 20 start with that and tell the jury how and why you 21 were, to use your word, recruited? A. Yes. 22 23 Q. Is that a fair description? 24 A. Yes. I was recruited by an executive 25 search firm, and I interviewed both at the

- 1 headquarters, first in New York City, and then at
- 2 the Research and Development Center in Richmond,
- 3 Virginia. Interviewed with Dr. Robert B. Seligman
- 4 and Mr. Clifford Goldsmith in New York, and then in
- 5 Richmond with Dr. Helmut Wakeham, Mr. Frank
- 6 Resnick, Dr. Tom Osdene, Dr. Walter Ganon, and Dr.
- 7 William Dunn.
- 8 And, again, the job opportunity was to
- 9 join them and with the ultimate understanding that
- 10 I would become a director of research of some type
- 11 with two missions in mind: Mission No. 1 was a
- 12 diversification into areas other than tobacco which
- 13 Philip Morris was interested in at that time; and
- 14 the second was the development of the safer
- 15 product.
- 16 Q. Now, you used the word recruited, and 17 that would imply, I guess, that you weren't going
- 18 there looking for a job; they came to you?
- 19 A. The executive search firm was -- I don't
- 20 really know how to say it -- Hydrix or Hindrix &
- 21 Struggles. I remember because of Struggles. But
- 22 it's a well-known recruiting firm. And I was
- 23 called, and for a little while I didn't know. Of
- 24 course, when you get those calls, you don't know 25 who the company was. I knew it was tobacco. And

- as you goes on, you eventually find out more and more about the job. But they came after me.

  Okay. Now, you have named a number of people, and I think, just to get some orientation of them, I'm going to ask you to step down to the
- 6 presenter, and see if I can make this -- this is
- 7 Plaintiff's Exhibit 105. And I'm going to see how 8 well I can get it positioned on the viewer so that
- 9 you can show the jury at least some of the names
- 10 that you have just listed. This is really not --
- 11 let's see. I'm not sure which direction has a
- 12 better focus.
- 13 Well, the title of this document is
- 14 Research and Development Department.
- MR. COFER: That is better.
- MR. GAYLORD: Can I ask the jury if I'm focussing at all, Your Honor? I can't tell where
- 18 I am.
- 19 JURORS: Getting better.
- 20 BY MR. GAYLORD:
- Q. Are you familiar with this document?
- 22 A. Yes, I am.
- Q. Okay. Why don't you just circle on the
- 24 document some of the names that you have just been
- 25 mentioning and what it is?

It's a chart organization, but of what 2 part of the company? This is a chart organization of the 4 research and development department. Looking at 5 this document, its approximate vintage is '78 or '79. It says '79 on the bottom here. And the 7 person that I interviewed in New York who later 8 became the vice president of R&D is here, Robert G. 9 Seligman. Dr. Wakeham at that time was corporate 10 vice president of science and technology, but at 11 the time I first interviewed he was the out-going 12 vice president of R&D. Dr. Seligman actually came 13 in and replaced him. 14 This is after my first year -- actually, 15 it's in the third year. So, I had already become 16 director of applied research, but the other two 17 people that I mentioned was Dr. Thomas S. Osdene, 18 director of research on this chart, who I 19 interviewed. And Dr. Walter F. Ganon, who is the 20 director of development at this time. 21 THE COURT: Mr. Gaylord, the exhibit 22 needs to be moved up. 23 THE WITNESS: So, Dr. Walter F. Ganon is 24 here. Dr. Thomas S. Osdene, here, as director of research. And this is my name in this box.

I'm looking for and I don't see on this particular chart Dr. Dunn, but he had a staff position reporting to Dr. Osdene. He was the company psychologist.

5 BY MR. GAYLORD:

- Q. Let's show you one of the subparts of Exhibit 105, just to answer the question you have gust raised. This is a part of the larger research department that is Dr. Osdene was the director of, is it not?
- 11 A. That's right. And this is Thomas S. 12 Osdene, director, and here is Dr. Dunn, who I also 13 interviewed, reporting to Dr. Osdene.
- Q. Okay. And so the relationship between these two charts is that the first one is the larger picture and then, if we focus in on the Osdene part of that, we get the second chart?
- 18 A. Correct.
- 19 Q. Okay. While we're at that, let's show 20 where you fit and in a closer view. Okay.
- 21 Dr. Osdene's subheading was research and yours was 22 applied research?
- 23 A. That's correct. At this time, 1979, I 24 was director of applied research.
- Q. That is a little high.

A. I had three staff scientists, Dr. Lowitz, 2 Dr. Lilly, and Dave Clark. And there were three 3 divisions: The biomaterial science division, which 4 had to do with tobacco and all kinds of tobacco 5 technology; computer applications, where we applied the computer to various problems that we had. For 7 example, in modeling and calculating how various 8 components are delivered when you smoke a 9 cigarette. And Dr. Desman was the manager of the 10 physical research division, which studied physical 11 properties of like the cigarette smoke and the 12 cigarette itself. 13 Q. Just while we have these items in front 14 of the jury, again. Dr. Osdene's director of 15 research and Dr. Dunn, as a subunit of that. 16 Is Dr. Dunn the person that we have heard 17 of as being referred to as the nicotine kid? 18 Α. Yes. 19 There are other names in here that may be Q. 20 of interest and other evidence that the jury has 21 heard. But, at least as of this October '79 date, 22 all of those names should be locatable within this 23 set of documents that is Exhibit 105? 24 A. As far as I know, yes.

25

Q. Okay.

119 Now, what was about it, the approach that 2 Philip Morris made to you, through recruiters, that 3 interested you or attracted you to become a 4 scientist at Philip Morris? 5 Well, it was a very challenging 6 opportunity at this point. Obviously, it's a 7 company that has great resources, and one of the 8 things that I was impressed by was their 9 understanding of the problem that they faced. They were concerned about not being in 10 11 business, as may be not being in that business on a 12 short time scale of maybe 10 to 20 years, that 13 business being selling cigarettes.

14 The second part of it is that there was 15 an understanding that their product needed to be 16 made safer. And they were putting great effort to 17 that end. So it seemed like a worth-while thing to 18 do, help them in those endeavors.

Q. Now, I want to focus on one of the things you just said, not being in that business and you said some years. Were their indications made to you in this time period when you're being recruited that Philip Morris had some expectations about a limited life expectancy to the cigarette?

A. Yes. The Philip Morris concern was that

- there was greater concerned over smoking and health that their sales would decrease over time, and they could not depend on cigarette sales as being the main business. And so there was active interest in going out and acquiring other companies to make a larger company so if the cigarette sales would decrease they would still be in business.
- 8 Q. And the part of the attraction to you 9 that you have mentioned about diversification, did 10 that have to do with this idea that Philip Morris 11 was going to be a bigger company with a broader 12 range of products and needed somebody with 13 expertise in analyzing and in doing technology of 14 those products?
- A. Well, the way I it was explained to me, because of my background with Lever Brothers, being with all of these other consumer products, that if they were diversified into the consumer products area that I would be very helpful to them in understanding which companies to acquire and toward helping them evaluate the technology that those companies might have.
- In fact, I did that for Lever Brothers.
  Lever Brothers was owned by Unilever, which is an
  Anglo-Dutch company that owns Lever Brothers U.S,

1 and I had helped them determine what companies they
2 should acquire and what technologies those
3 companies had.

So that was one of the reasons given to me for being interested in my background.

- Q. Now, did you go to Philip Morris with an expectation about the position that was going to be yours sooner or later after you got there?
- 9 A. Yes. I was told that they wanted to have
  10 me spend some period of time learning about how
  11 cigarettes are made and all of the technology
  12 involved from their perspective as an employee, and
  13 that after that time I would become director. And,
  14 as I understood it, gradually Dr. Osdene's
  15 responsibilities would be decreased so that he
  16 could focus more specifically on smoking and
  17 health.
- Q. Now, we have seen only these charts, a couple of different titles. It sounds like they might overlap. I wonder if you could just explain how those territories were defined; that is Dr. Osdene was the director of research, and you were to become director or applied research. What was the line between those?
- A. In the beginning, the line was physical

1 chemistry, physics, bio-materials, the properties 2 in tobacco. Then it gradually shifted. I 3 gradually obtained responsibility for the 4 analytical chemistry and organic chemistry. Dr. Osdene was focussed on the biological 6 testing of which there were two types. One is ell 7 level testing that was done in house at Philip 8 Morris in our research building. Such things like 9 mutagenicity and testing the cell levels where you 10 look at the effect of tobacco smoke and/or 11 components of tobacco smoke, as they might affect 12 bacteria or hamster cells or some other kind of cells, called cell-level testing, also sometimes 14 referred to in vitro testing. It's not a living 15 system. The other part of the testing he was 16 17 responsible for was called vivo testing, where they 18 do animals and testing the animals and that was 19 carried out in Europe. 20 Q. Okay. We'll get back to that in a little 21 while. I kind of wanted on get the basics of what 22 was Dr. Osdene's coverage and what was yours. 23 Sounds like testing, in the sense of the 24 safety and science of tobacco smoke, to the extent

25 that it was being done in house at Philip Morris,

- 1 it was in Dr. Osdene's department? A. Yes. He was involved in the safety 3 testing of the product. Q. And how was applied research defined as 5 it became your director? A. Well, we developed the things that trying
- 8 For example, we had products projects to decrease

7 to look at it one simple way that he might test.

- 9 carbon monoxide, to decrease some of the
- 10 carcinogens. One of the great carcinogens of
- 11 concern is a class of chemicals referred to as
- 12 tobacco specific nitrosamines, and these come about
- 13 because of the interaction of the alkaloids, like
- 14 nicotine, with nitrates that are being burned.
- 15 Nitrates in tobacco are there because of over
- 16 fertilization and being picked up by the plant.
- When you burn nitrates it makes oxides of
- 18 nitrogen, which then react with the nicotine and
- 19 the other alkaloids in tobacco to make those
- 20 tobacco-specific nitrosamines.
- So, we had projects, for example, to 21
- 22 reduce nitrates. If you reduce nitrates you would
- 23 reduce tobacco-specific nitrosamines. You would
- 24 also reduce oxides of nitrogen, which are not good.
- 25 That is a common air pollutant. And we had

1 projects to filter out the tobacco-specific 2 nitrosamines after they were made.

3 So we did the physics and chemistry, and 4 then he would test the products containing those 5 changes to see if it made an improvement.

Q. Okay. I'm going to -- you have just thrown a whole bunch of terminology at us, and I'm going to ask you to find a place in front of the jury where the jury can see it. Just write down a few of those terms that I think are fairly large ones on the subject.

But to recap what you have just covered, in terms of distinction between your part and Dr. Osdene's part, is the -- are the projects that you described that were under supervision projects in pursuit of that second goal of yours when you came to the company; that is to say the opportunity of to make a safer product?

- 19 A. Yes. And over the period of time I have 20 estimated that about 80 percent of my time was 21 actually spent in pursuing the second goal, the 22 safer product, and about 20 percent in the merger 23 acquisition area.
- Q. Okay. There was an 80-20 mix between the two goals that they hired you for, essentially?

- 1 A. That's correct.
- Q. All right. You said a number of things, and I'm going to ask you to make use of the pen and show us, with a few words, the subject areas. You described Dr. Osdene's group. You said cell-level testing, and you used the word mutagenicity?
  - A. Correct.

7

- Q. Maybe write that word down and tell you us what that has got do with anything.
- 10 A. Mutagenicity is the mutation that is
  11 caused at the cell level in a cell when it is
  12 divided. It changes. It deviates from the genetic
  13 information encoded in the DNA. It does something
  14 different than it did the last time the cell
  15 divided.
- 16 There's carcinogenicity.

17 And then there's Teratogenicity, which I 18 always have trouble spelling. Those are the three 19 genicities, if you will.

And teratogenicity is more like a problem that occurs in the next generation of offspring, a change in a cell that doesn't show up until some future generation of cell division.

24 Carcinogenicity also obviously is cancer. 25 It's a Wild growth of cells uncontrolled.

- 1 Mutagenicity simply implies a change.
- 2 The normal thing that happens is you have a mutagen 3 causing mutation and that leads to carcinogenicity.
- Q. Okay. Is that a way of saying when that when a living organism has cells that will multiply and divide, mutagenicity is when something goes wrong in that process?
- 8 A. Mutagenicity is the first link of 9 something goes wrong. The cell mutates, and then 10 it becomes carcinogenic, when it undergoes wild 11 uncontrolled growth, taking over the organism.
- 12 Q. So, carcinogenism is a particular kind of 13 mutation?
- 14 A. Well, no. The mutations lead to the 15 carcinogenisis.
- Q. Okay. Now, what I think I want to ask you about on this subject, before we get back to some words related to what you told us about, your subject, you are a director.
- When you went to work for Philip Morris, the first thing you had to do was learn about that business.
- 23 A. Correct.
- Q. I'm not right now going to ask you, but you learned about the process of making cigarettes.

- 1 We'll go into that. But did you learn a kind of 2 new vocabulary in terms of what were the words used 3 and the concepts shared among the scientists at 4 Philip Morris about their products?
  - A. Yes, I did.

5

- Q. Describe for the jury -- before I do
  that, let me ask you this. We have seen a chart
  that shows you have got directorate, Dr. Osdene has
  a directorate. There are other subdirectorates and
  subbranches to this part of the Philip Morris
  corporation.
- Were you and Dr. Osdene and the people
  working for each of you separate worlds or how was
  the -- what was the working relationship, if any,
  between your people and his people?
- A. Not entirely separate worlds. As I said, we had -- the people working for me had no ability to do safety testing on the changes that we were making. So we would provide either information on what changes to be made to Dr. Ganon who might try to make them or we would provide examples of those changes prototype the products to Dr. Osdene, and he then would have them tested. And then we would have joint meetings where the results of those,
- 25 those pieces of information might be shared. And

- 1 in some cases we never would find out what the 2 answer was.
- But Dr. Osdene was in charge of doing
- 4 that kind of testing. So we had a working
- 5 relationship, and then some the other projects, for
- 6 example, on carbon monoxide production we actually
- 7 had a task force put together. So, some people who
- 8 worked for me, some people who worked for
- 9 Dr. Osdene, some from Dr. Ganon's area, and we
- 10 would all work on the project.
- 11 Q. Okay. Now with respect to you
- 12 personally, in your working relationship with other
- 13 parts of this research organization, when you went
- 14 to work there, did you become acquainted with all
- 15 of your colleges?
- 16 A. Yes, I did.
- 17 Q. Did you spend time for the express
- 18 purpose of learning those people and learning what
- 19 they were doing?
- 20 A. Yes. I mean, during my first year,
- 21 particularly, I visited -- well, there were some
- 22 secret off-limits areas, but, other than those, I
- 23 talked with all of the division managers, and that
- 24 sort of thing. Met with the people. Learned the
- 25 projects.

I attended -- we used to have meetings, 2 weekly meetings where every project would be 3 reviewed on a weekly basis, and that continued for 4 the entire eight years I was there. So all of the non-secret projects, and 6 there were several secret ones, they would be 7 reviewed on a weekly basis. 8 And then I would talk to those people. I 9 also toured all of the plants. I toured the 10 manufacturing center where the cigarettes were 11 made. 12 And then we also had facilities that made 13 materials that went into the cigarette. These are 14 places where we took, for example, scraps and 15 pieces of tobacco and put them into sheet materials 16 that look a little bit like tobacco. Used those in 17 cigarettes. 18 We had a facility that took tobacco and 19 puffed it up, expanded it back. When you cut 20 tobacco and you chop it up, and it dries out, it 21 kind of shrivels up. And Philip Morris and all of 22 the other companies had technology that allowed 23 them to puff that back up, called expanded tobacco. 24 Q. Let me, if I may, interrupt you again. 25 I'm going to come back to what you referenced about

- 1 the processing and the manufacturing part of the
  2 business. But right now, so I don't you forget to
  3 do it, I want to stop on a topic and ask you about
  4 this.
- Based on your orientation of yourself to the Philip Morris cigarette business and your
- 7 meeting and talking to the other scientists in the
- 8 part of the business you went to work for, did you 9 develop an understanding about the position of the
- 10 Philip Morris scientists, in general, on the
- 11 question of relationship between smoking cigarettes 12 and lung cancer?
- 13 A. I did.
- 14 Q. Tell the jury what you learned about that 15 understanding or position of the scientists in this 16 branch of Philip Morris?
- 17 A. Well, the cigarette generates a wide 18 variety of mutagens, which are chemicals that cause 19 mutations, and the mutagens impact cells.
- 20 Mutagenicity occurs, and that develops into cancer.
- 21 And what we were commonly trying to do
- 22 was to reduce the incidence of mutagenicity by
- 23 decreasing the number and quantity of mutagens.
- 24 It's sort of like if you look at a living 25 cell as being sort of a person, and you think of a

- 1 mutagen as being a bullet shot towards the person.
- 2 And let's say you're shooting, you know, 100,000
- 3 bullets, but they are far away. You might not
- 4 really hit them. We can reduce that to 90,000.
- 5 Then down to a 10,000. And then down to 5,000.
- 6 You the probability you are going to hit them. So
- 7 that is the general philosophy of the safety
- $8\,$  research. It's to try and reduce the number of
- 9 mutagens or probability of attack of that cell.
- 10 Q. When you were being recruited to go work 11 for Philip Morris, did anybody suggest to you in
- 12 that process that there was an unfair inaccusation
- 13 being made against cigarettes as the cause of lung
- 14 cancer?
- 15 A. No.
- Q. When you were being oriented to the work
- 17 that you were to do at Philip Morris by meeting
- 18 with the other scientists and talking with them 19 about various projects, did anybody ever suggest to
- 20 you that there was a controversy about whether or
- 21 not lung cancer was caused by smoking cigarettes?
- 22 A. Well, the issue of controversy came up.
- 23 Dr. Osdene explained to me that one of his job
- 24 functions was to maintain the controversy, was to
- 25 fuel the controversy. I mean, there was no people

- within the organization weren't -- I mean, in order to solve this problem, you have to recognize the problem, take steps to solve the problem. So, the people that were working on the problem understood the mechanisms that I just described, and they were working to try and reduce that.
- By the same token, Dr. Osdene expressed
  the concept that part of his job was to attack
  outside reports of links between smoking and cancer
  or smoking and emphysema or things of that sort by
  maintaining that there's a controversy and
  providing the information that would discredit or
  somehow cast down on the outside research.
- Q. Was that subject with Dr. Osdene something that came up in conversation from time to time throughout your career there?
- 17 A. Yes. We had many discussions and 18 arguments, if you will, concerning that.
- Q. And we may see when we get into these documents a little more -- some examples of it, but did Dr. Osdene express sometimes frustration and difficulty at the task of maintaining that there was controversy about these subjects?
- A. Well, I think, you know, for Dr. Osdene it was an uncomfortable position to be in. And, I

- 1 mean, Dr. Osdene was trying at the same time to
- 2 work with us to develop safer products. So, it's
- 3 sort of -- it's a difficult position Dr. Osdene was
- 4 in, a very difficult position, because at the same
- 5 time he's trying to help the people within the
- 6 research and development division develop a safer
- 7 product, and on the other hand he's trying to come
- 8 up with reasons why other people who might purport
- 9 to discuss things about smoking and disease are
- 10 incorrect. So, it's kind of a very tough position
- 11 to be in.
- 12 Q. During your orientation to Philip Morris'
- 13 business, did you also review documents available
- 14 to you that went back in history before your
- 15 contact with the company?
- 16 A. Yes. For every project that I reviewed,
- 17 I went into the library. We had an extensive
- 18 central file system. And in talking with people, I
- 19 would ask them for documents. It's a typical
- 20 scientific method to try and get as much
- 21 information about past research done there as
- 22 possible.
- Q. And within the internal documents of
- 24 Philip Morris, did you also find references to the
- 25 acknowledgement of smoking cigarettes as a

1 carcinogenic thing to do? 2 A. Yes. Well, carcinogenic -- and, you 3 know, because sometimes it's not nice to see things 4 like this used in those words. You'll find that 5 this summation of these three things referred to in a lot of reports as biological activity. It is 7 also used when you don't want to be specific about 8 what you are talking about. Caused a bad change. 9 And/or this could be called biological effect. But if you looked at the study and you 10 11 went and talked with a person, you could usually 12 determine which of the things we were talking about 13 here. 14 There's another, just plain toxicity, 15 because a lot of the compounds are just plain 16 toxic. 17 MR. COFER: We can't see that on the 18 monitor. 19 MR. GAYLORD: You want to move that over 20 to your right. 21 MR. COFER: A little more. 22 MR. GAYLORD: To the right. Right. 23 BY MR. GAYLORD: Q. Biological activity then, would it be 25 fair to call it a euphemism that was used in the

- 1 company to describe, without using words like 2 carcinogen?
- A. Yes. And if you read the reports you'll 4 see it referred to a lot.
- Q. Okay. Now, I just wanted to show you one 5 6 example and ask you if this is -- again this is an 7 exhibit in evidence, Plaintiff's Exhibit 53, a 8 Philip Morris document, dated March 25, 1964.
- 9 It's large enough to read. Entitled 1965 10 Cigarette Program Objectives and Approaches. And 11 is this a document you have some familiarity with?
- 12 Yes. I'm going to skip over to the topic 13 of nicotine delivery on here just for moment, and 14 we'll probably come back to that.
- But with respect to what you learned at 15 16 Philip Morris and your orientation about the 17 relationship between smoking and lung cancer, Item 18 4 says: "The product design should include consideration of chemical carcinogens within the 19
- 20 following framework." Is that one reference to an 21 22 acknowledgement by Philip Morris that the cigarette 23 products contained cancer-causing chemicals?
- A. Yes. 25 Q. And were there many others?

24

- 1 A. Any others?
- Q. Were there many other references?
- A. Oh, yes, many others.
- 4 Q. Okay. Now, let's turn to a similar
- 5 series of questions but different topics.
- 6 In your orientation to the cigarette
- 7 business as a new employee at Philip Morris and
- 8 your opportunity to converse with other scientists
- 9 and work your way through the business -- by the
- 10 way, let me back that up.
- Was that was just something you did on
- 12 your own or was that a specific assignment that you
- 13 received?
- 14 A. It was an assignment.
- 15 Q. You were instructed to familiarize
- 16 yourself with the whole business?
- 17 A. Correct. It was a good idea. It was
- 18 also an assignment.
- 19 Q. When you say the whole business, it
- 20 wasn't just science going on and the science part
- 21 but the manufacturing businesses?
- 22 A. That's correct. Special effort was made
- 23 to make sure I even went out with, for example, the
- 24 leaf purchasing team to buy tobacco. And, you
- 25 know, out in the filed. I went to the farms.

1 Philip Morris doesn't grow tobacco, but -- not in 2 the United State's, but they buy it off the open 3 market, but we had to understand how it was raised 4 so we had actually to visit farms, and in our 5 research we actually did work on growing tobacco on the farms. So all of that, right from the place 7 where they grew it, to the place where they 8 processed it, all the way through the entire 9 process. 10 Dr. Farone, before I leave the subject of 11 cancer and the understandings and expressions of 12 that subject, as you became oriented to the business, let me ask one question about that. 14 Did you ever run into anybody, in your 15 orientation to the business of Philip Morris, any 16 scientists, any manager, did anybody ever tell you 17 that cigarettes smoking did not cause cancer? 18 No. And in talking with them -- the 19 science doesn't really work that way. You have a 20 hypothesis. And your cumulative evidence which leads you to a hypothesis. The hypothesis is that 21 22 smoking causes cancer by the mechanism I just 23 described. In order to refute that, my hypothesis, 24 you have to present evidence to the contrary.

So I never heard anyone say that they had

1 evidence to the contrary. What you would hear occasionally was that 3 well so and so had published a paper and that paper 4 wasn't done very well. So, that doesn't provide additional 6 evidence for the hypothesis. That is the nature of the so-called controversy. This controversy is 7 8 attacking other people's support of the hypothesis. 9 But I never heard anyone at Philip Morris say that 10 they had any evidence to refute that hypothesis at 11 no time. 12 All right. Q. 13 Now, I want to move to the subject of 14 nicotine and addiction, and, again, ask you what 15 you learned, what people brought to your attention, 16 what became your understanding from your 17 orientation about the internal knowledge of Philip 18 Morris about the addictiveness of nicotine. A. Well, the operating hypothesis was, even 19 20 before I went there, it was never denied, is that 21 people smoke for nicotine. That is the reason. 22 Other alkaloids in tobacco. There are some other 23 ones; may have some minor effects. There are some 24 other things, but basically it's nicotine.

There was -- I went there with the

- 1 knowledge, for example, in the 1950's. There was a 2 product on the market called Sano cigarettes, and 3 it was King Sano. That was a denicotinized 4 cigarette. And unlike decaffeinated colas, which captured the market, those products never made it. So, there was a general conclusion that was 7 accepted that people smoked for nicotine. 8 And in addition, when I went, Philip 9 Morris was in the process of introducing the Merit 10 cigarette, which is the mid-'70s, when the low-tar 11 category really came into being. And there was a 12 recognition if you reduce the nicotine too far people might not smoke their product. On the other hand, the nicotine itself as far as was known was 15 not -- was toxic, but not mutagenic, and it's not 16 carcinogenic. 17 So, what was being done there and 18 throughout the industry was to maintain the level 19 of nicotine to the smoker while reducing the tar. 20 So, while in general the nicotine was 21 being reduced, it was not being reduced as much as 22 the tar was being reduced.
- 24 maintaining nicotine in smoke. 25 O. I know -- I think I want to go through,

So, everything was focused on the

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http://legacy.library.ucsf.@du/tie/xhtttp5a00/pdfindustrydocuments.ucsf.edu/docs/sjxd0001

1 and not be too tedious about it, a series of 2 documents, and with respect to the nicotine 3 question. Did you acquire knowledge from a great 5 many documents that were in the files and archives of Philip Morris as part of your orientation about this subject of the relationship between nicotine 7 8 and the reasons why people smoke, about the 9 addictive quality of nicotine, habit forming, 10 dependent forming, chemical-dependence forming 11 qualities? 12 For example, Plaintiff's Exhibit 36, I'll 13 set that aside and come back in a moment. 14 Plaintiff's Exhibit 36 is dated August 3, '69, '59 -- it's a lousy old copy, and it contains the 15 16 question -- this is from or to a Dr. Dupris in 17 physchological research: Why do people smoke? And 18 it goes on in several parts. But item 3, 1959, is 19 addiction. Is that one of the documents that you 20 are familiar with? 21 Α. Yes. 22 Q. Is that part of the basis for your saying 23 that that was an established understanding of

A. Correct. There are many documents.

24 Philip Morris?

- Exhibit 42, Philip Morris Incorporated, Q. 2 Tobacco and Health. R&D approach. This was 3 presented by Dr. Wakeham at a meeting held in the 4 New York office, November 15th, 1961, which states 5 on Page a number of which I can't find, but it's somewhere in the document. "Controlled nicotine in 7 filler and smoke. Even though nicotine is believed 8 essential to cigarette acceptability, a reduction 9 in the level may be desirable for medical reasons." Let me ask you about that phrase 10 11 acceptability. Is acceptability another euphemism 12 used at Philip Morris with respect to smoking and 13 cigarettes?
- 14 A. Well, I don't know how it's being used in 15 this context. Normally one talks about 16 satisfaction and impact. So, I can't -- I don't 17 know what was meant by acceptability, other than 18 you need to have it.
- Q. Okay. When you say you need to have it, you mean it was understood at Philip Morris that the smoker needed to have nicotine in order to have the product be accepted?
- A. That's right.
- Q. And back to Exhibit 53, March 25th, 1964, the section on nicotine delivery. Again, this is

- 1 The 1965 Cigarette, is the name of the document.
- 2 Program objectives and approach. Nicotine delivery
- 3 level should be zero point seven milligrams,
- 4 minimum.
- 5 A. That was later modified. You don't need 6 that much, actually.
- Q. Okay. Was the concept that there was a minimum level of nicotine that you needed ever modified?
- 10 A. The idea is that you needed to have a 11 certain amount of nicotine before the smoker will 12 feel satisfied. And the amount of nicotine that is 13 required depends on a lot of things, like what form
- 14 nicotine is in, because this is in the tar going to
- 15 the smoker. And it also depends on what other
- 16 things might be in the smoke to modify the effect
- 17 of nicotine. So, at this early time, the level was
- 18 thought to be point seven. When I was there the
- 19 level that would be satisfying turned out to be
- 20 between point two and a point three, around in
- 21 there. Actually, about half that level.
- 22 Q. Okay.
- Now, this is, I guess, a foreshadowing.
- 24 We'll get there later. But I don't want to step
- 25 into that completely right now.

But preview, was there a time when Philip 2 Morris learned to do and did do a number of things 3 to modify how much nicotine was necessary and how 4 it effected the smoker?

Well, how much is necessary is how much is necessary. But how much you deliver and in what form was modification that was done by Philip 7 8 Morris, yes.

9 The other thing I would like to point out 10 is that when you see numbers like this, point seven 11 milligrams, that refers to the nicotine delivery per cigarette as measured by the Federal Trade Commission, the FTC, and unfortunately that is not 14 the way people smoke.

So you in provide somebody half that and 16 they suck down the cigarette twice as hard, they 17 would get that level even though the FTC label said 18 point 35 or point 30 on the box. So we have to be 19 very careful when we see these numbers not to think that they described the actual delivered nicotine 21 to the smoker.

Q. Okay.

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23 Without focusing as much on the numbers 24 or the precision with which they were known at some 25 point in time, was it always known by Philip Morris

- 1 that for the cigarette to be a successful product
- 2 it had to be able to deliver some amount of
- 3 nicotine to the smoker?
  - A. Yes.
- 5 Q. Because of the drug effect of nicotine on 6 the smoker?
  - A. Yes.

7

- 8 Q. The note also says in their projections
- 9 for 1965, Item B, under nicotine delivery, "Add
- 10 nicotine to cigarette and define contribution of
- 11 nicotine to be flavor."
- 12 All I want to ask about that right now is
- 13 was it within the technology at Philip Morris that
- 14 was understood and available to them to manipulate
- 15 how much nicotine was in the cigarette?
- 16 A. Yes.
- Q. Did Philip Morris, to your knowledge,
- 18 always have the ability, from the time at least
- 19 that you were there, to remove the nicotine in the
- 20 cigarette?
- 21 A. Yes, they did.
- Q. And to put back as much as they chose to?
- 23 A. Correct.
- Q. I sabotaged myself by putting my notes on
- 25 one of these documents.

- 145 Plaintiff's Exhibit 59, Special Report 2 No -- this is out of focus on the photocopy. 3 Special report No. 248. Market potential of a 4 healthy cigarette. Plaintiff's 59. Are you 5 familiar with this document which is a report of June 1966 written by M. Johnston, Jr? Α. Yes. 8 Q. Is that Myron Johnson? That is Myron Johnson, supervisor at that 9 Α. 10 time of Dr. Dunn. Q. And it says approved by Dr. Dunn? 11 Yes. 12 Α. 13 Q. And this would have been among the 14 documents available for your review as your 15 oriented yourself to the company? 16 A. Yes. 17 Q. And on a page called Conclusions, "The 18 anti-cigarette propaganda will probably be more
- 19 effective in reducing the rate of smoker 20 recruitment than in stimulating smokers to quit or 21 switch." 22 Item 4: "The Surgeon General's report
- 23 had markedly less effect on the demand for health 24 cigarettes than the first health scare in the 25 1950s. Any future heath scares will probably have

1 less effect."

17

And Item 5: "Thus a new healthy
cigarette entry could not rely on increased demands
for health cigarettes but would have to take its
place at the expense of existing brands of health
cigarettes."

Was it part of the understanding that you gained from your fellow employees at Philip Morris that it was known that the health concerns about cigarettes were more effective in preventing people from starting smoking than from in persuading them to quit smoking?

- 13 A. Well, actually not really, by the time I 14 got there. This is an earlier document. But the 15 interesting thing about the document, if you could 16 put it back there for a minute.
  - Q. Okay. I have got more about it, too?
- 18 A. It talks about less effect on the demand
- 19 for health cigarettes. So, you might -- I asked
- 20 the question well, what are we talking about?
- 21 What's health cigarettes? The answer is that when
- 22 they first put a filter on a cigarette that was
- 23 viewed by the industry as being a health cigarette.
- 24 In other words, it was an implied health claim
- 25 because the filter obviously is going to help you

- 1 get rid of some of the bad stuff. That's what's
  2 being referred to in the first health scare in the
  3 '50s. '50s where the advent of the filtered
  4 cigarette. And then the '70s, which comes after
  5 this document, the low tar era.
  6 There's another thing in between which is
  7 also considered a health cigarette, and is that the
  8 addition of menthol. Menthol was viewed as
  9 being -- you know, menthol is used for ease in
  10 coughing. Menthol is in cough drops and things
- 11 like that. So, if you have trouble with your 12 throat, and things like that you put menthol in a 13 cigarette, obviously, it's going to help you.

So when I first heard about this stuff I was interested in what that meant.

- 16 Q. When you said obviously that is going to 17 help, are you saying that it really was going to 18 help or are you saying that was an approach?
- 18 help or are you saying that was an approach?
  19 A. That was an approach. I didn't see any.
  20 I didn't have any data, nor have I seen any data at
  21 Philip Morris that would imply or show that a
  22 menthol cigarette was less carcinogenic or less
  23 toxic than a regular cigarette.
- Q. Was the concept of a health cigarette as you have just defined it something that was used at

- 1 Philip Morris as a kind of an implied
- 2 representation about products to the effect that
- 3 consumers would take them as more healthy?
- A. The whole industry, actually. It's not a
- 5 Philip Morris thing. It's just those are
- categories within the industry that came about
- 7 because of the perception that those things would
- 8 be somehow safer.
- Q. Okay. We'll probably get to some other 9
- 10 documents that talk about perception of filtration 11 being what mattered.
- 12 On this page, Page 5, Exhibit 59, was
- 13 Mr. Johnson's statement, quote, "A cigarette that
- 14 does not deliver nicotine cannot satisfy the
- 15 habituated smoker and cannot lead to habituation
- 16 and would, therefore, almost certainly fail."
- 17 Was that notion one of the sources and
- 18 consistent with the information you received about
- 19 the company's awareness of the addictiveness of
- 20 nicotine?
- Yes. 21 Α.
- 22 Q. And it's an essential role in the ability
- 23 to continue to sell cigarettes?
- 24 A. Yes.
- 25 Q. I'm going to try move a little more

- 1 quickly through some of these documents. Exhibit
- 2 67, to Dr. Wakeham, from Dr. Dunn, February 19,
- 3 1969, and this statement, it's very hard to read,
- 4 but I'll read it. "I would be more cautious in
- 5 using the formic medical model. Do we really want
- 6 to tout cigarette smoke as a drug? It is, of
- 7 course, but there are dangerous FDA implications to
- 8 having such conceptualization go beyond these
- 9 walls."
- 10 Was that a concept about the role of
- 11 nicotine that was familiar to you through your
- 12 orientation to this product with the company?
- 13 A. Yes.
- 14 Q. Was that concern about letting anybody
- 15 know that nicotine was, in fact, a drug frequently
- 16 expressed by your fellow scientists and employees
- 17 at Philip Morris?
- 18 A. Part of openly publicizing, yes, it was a
- 19 concern. But we did a lot of work on, you know,
- 20 drug type research on making nicotine analogs,
- 21 chemical compounds that could take the place of
- 22 nicotine, but so I don't think there was any
- 23 confusion within the company as to the fact that
- 24 this was a drug and what it was doing.
- Q. Okay. This is a document, No.

- 1 Plaintiff's 72, from Dr. Dunn in the Fall of 1969.
- 2 It is the first draft and annual report to the
- 3 Philip Morris board, by vice president for research
- 4 and development Dunn, entitled "Here Is Why One
- 5 Smokes."
- 6 And on the second page: "We have then as
- $7\,\,$  our first premise that the primary motivation for
- 8 smoking is to obtain the pharmacological effect of
  9 nicotine."
- 10 A. I'm sorry. I think you said this was
- 11 Wakeham's document.
  12 Q. This is Dr. Dunn in the Fall of 1969, a
- 13 draft report to the board.
- 14 MR. COFER: Excuse me, counsel. What's
- 15 the number?
- MR. GAYLORD: Plaintiff's Exhibit 72.
- 17 MR. COFER: Thank you.
- 18 BY MR. GAYLORD:
- 19 Q. This is from Dr. Dunn to Dr. Wakeham.
- 20 It's a draft perhaps of Wakeham's talk?
- 21 A. Well, I saw it in the, deposition.
- 22 Dr. Wakeham's materials. So, I didn't, but yes.
- Q. I think our information is that this is
- 24 Dr. Dunn's draft for Dr. Wakeham.
- A. Okay.

- Q. And the pharmacological effect is another way of saying nicotine is a drug?
  - A. Yes.
- Q. Plaintiff's Exhibit 74: "Smoker
- 5 psychology research by Dr. Wakeham." Presented to 6 the board. Perhaps this is the final form of that
- 7 last draft.
- 8 And it contains a statement on Page 11:
- 9 "We are of the conviction, in view of the foregoing
- 10 that the ultimate explanation for the perpetuated
- 11 cigarette habit resides in the pharmacological
- 12 effect of smoke upon the body of the smoker. The
- 13 effect being most rewarding to the individual under
- 14 stress."
- 15 Is that consistent with your
- 16 understanding of the company's understanding of the
- 17 relationship between nicotine as a drug and the
- 18 habit of smoking?
- 19 A. Yes.
- Q. Plaintiff's 84. Philip Morris
- 21 interoffice correspondence to Mr. Chris Bolton,
- 22 from Al Udo. Subject: The chemistry of Kool and a
- 23 recommendation. Date May 24, 1972.
- 24 And the passage says: "Although more
- 25 people talk about taste, it is likely that greater

- 152 1 numbers smoke for the narcotic value that comes 2 from the nicotine." Is that another statement of the same 4 point and its recognition and acknowledgement at 5 Philip Morris as the reason why people smoke? Α. Yes. 7 Ο. There's a document that the jury has seen 8 in some form, at least, before, Plaintiff's Exhibit 9 6. Motives and Incentives in cigarette smoking, 10 Dr. William Dunn, Philip Morris Research Center. And I think this is the famous tropical 11 12 island speech, St. Martins. Page 4: "No one has ever become a 13 14 cigarette smoker by smoking cigarettes without 15 nicotine." Page 5: "Cigarette is in fact among the 16 17 most awe-inspiring examples of the ingenuity of 18 man. Let me explain my conviction. The cigarette 19 should be conceived not as a product but as a
- 21 The package is nicotine?

20 package."

- 22 A. The product is nicotine.
- Q. Thank you. The product is nicotine.
  Think of the cigarette package as a
- 25 storage container for that day's supply of

- 1 nicotine. Think of the cigarette as a dispenser
  2 for a dose unit of nicotine. Think of a puff of
  3 smoke as the vehicle of nicotine. Smoke is beyond
  4 question the most optimized vehicle of nicotine,
  5 and the cigarettes the most optimized dispenser of
  6 smoke."
- 7 Are these statements all part of the 8 milieu you entered into when you became an employee 9 of Philip Morris and part of the uncontroversial 10 acknowledgement of Philip Morris and its scientists 11 about the role of nicotine in smoking?
  - A. Yes.

12

- Q. Are they, in fact, the primary basis for a great deal of research that you oversaw and that was done by your department?
- 16 A. Yes. The idea was to maintain nicotine 17 while reducing the carcinogens, mutagens, and the 18 other chemicals that cause disease.
- Q. The last paragraph of this exhibit:
  "Having done a number of studies -- " and there's
  some numbers and letters that I expect describe the
  studies -- "in which we have systematically
  manipulated tar and nicotine parameters of
- 24 cigarettes. We are trying to see if we can make 25 any overall conclusions. Specifically, we are

- 1 trying to predict nicotine-tar ratios for optimal 2 cigarette acceptability and differing tar 3 deliveries." Is that in fact a notion that underlay 5 the primary reason for research, most of the research that was done under your supervision? 7 A. Not most of it, but the part of it that 8 related to low-tar cigarettes. 9 Q. All right. MR. COFER: Excuse me. That was 86, 10 11 counsel? What number that was? MR. GAYLORD: Yeah, it was 86. 12 MR. COFER: Thank you. 13 14 BY MR. GAYLORD: 15 Q. Plaintiff's Exhibit 94: Smoking Impact. 16 Very hard to read, but it says October 1975, 17 possibly, but I think it's 75. 18 A. I think it's 75. This I think occurred 19 the year before I came there, this study.
- 22 A. Yes.

20

21 with?

- Q. Smoking Impact. And it seems to say:
- 24 "Nicotine is the main determinant for sustaining
- 25 the smoking habit; although, other factors such as

Q. This is a document that you are familiar

- 1 smell, quality, et cetera, determine the preference
  2 for a particular cigarette."
- 3 Further corroboration of the same
- 4 acknowledgement about the role of nicotine in
- 5 smoking?
  - A. Yes.
- 7 Q. Bring it up to date. More current Philip
- 8 Morris interoffice memo. This is Plaintiff's
- 9 Exhibit 139. November 8, 1990. Now that is, of
- 10 course, after you have finished your period of time
- 11 at Philip Morris. This is to C.K. Ellis. Is that
- 12 somebody you know?
- 13 A. Yes.
- Q. Who is Cathy Ellis, when you were there?
- 15 A. She was a junior scientist.
- 16 Q. And F.P. Gullotta?
- 17 A. Yes, Frank Gullotta was in charge of the
- 18 EEG program. And Sydney Hayes I remember was his
- 19 assistant.
- 20 Q. Okay.
- Now, this says subject, and it's in
- 22 French. So, I'm bound to butcher it, but "raison
- 23 d'etat." How do you say that?
- 24 A. Raison d'etat.
- 25 Q. D'etat?

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I think.
1
        Α.
        Q. We have shown that there are optimal
3 cigarette nicotine deliveries for producing the
4 most favorable physiological and behavioral
5 responses. This is a retrospective on what they
6 have done in the prior period of time.
             And that statement is consistent, is it
 7
8 not, with what you have told us so far about what
9 was known and understood in the late '70s and '80s
10 at Philip Morris?
11
        A. That's correct.
12
             MR. GAYLORD: Well, talking further about
13
      some of these terms like delivery and that sort
14
     of thing, but just to establish the fact that
15
     Philip Morris knew about this.
16
             I think it's about the time and a break
17
      in subject for lunch, Your Honor.
             THE COURT: Thank you, Mr. Gaylord.
18
19
             Thank you, jurors. Notes on the chair,
20
     please. Remember not to talk about the case.
21
     Watch your step. Oh, we'll start at 1:30.
22
             Jurors, 1:30. Thank you.
23
24
        (Whereupon, the jury exited the courtroom.)
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THE COURT: Anything for the record from 1 2 Plaintiffs? 3 MR. GAYLORD: No, Your Honor. THE COURT: Mr. Cofer. MR. COFER: Yes. One thing. In 5 6 Mr. Thomas' opening statement he referred to the 7 other products the Philip Morris companies owns 8 and sells. I believe testimony today of Dr. Farone opened the door to evidence regarding 9 10 the diversification efforts of Philip Morris. 11 I raise this because Plaintiff had filed 12 a motion in limine to exclude that sort of 13 evidence. 14 I want to put Plaintiffs on notice that I 15 believe the door has now been opened, and I haven't decided what I'm going to do with it. 16 17 But in light of what happened yesterday, I want 18 to make it clear, my intentions. 19 MR. GAYLORD: I don't think the fact that this witness knows the word diversification and 20 21 went there with that subject on his list. It's 22 part of his qualifications opens the subject 23 of -- and I'm not even sure where it would go, 24 but I don't know where any relevance beyond that as part of his qualifications is gained by the

1 fact that he mentioned it. THE COURT: Well, I appreciate the 3 warning, Mr. Cofer. Let's wait to have the 4 conclusion of the witness' direct, and then you 5 can preview it for us. As I recall, the motion in limine had to 6 7 do with a risk of what Plaintiffs described as 8 unfair prejudice by describing Philip Morris as 9 the manufacturer of what? 10 MR. COFER: Philip Morris owns Kraft and 11 General Foods. 12 THE COURT: All right. All of those 13 clean wholesome things, she's saying for summary 14 purposes. 15 MR. COFER: Right. 16 THE COURT: And the witness has talked 17 about 20 percent of his job was in the area of diversification, and we'll just see how much 18 19 emphasis Plaintiffs place on it in the direct 20 testimony so I can balance it against what 21 plaintiffs thought was an unfair risk of bringing 22 in those other products. We'll take it up after 23 direct is concluded. 24 MR. COFER: Thank you. 25 THE COURT: Anything? Okay.

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1
              Anything else?
 2
             MR. GAYLORD: Not for Plaintiff.
             THE COURT: All right.
             Mr. Tauman, you say 1:25?
 4
 5
              MR. TAUMAN: Yeah, that would be fine.
              MR. DUMAS: Yes, Your Honor.
THE COURT: Okay.
 6
 7
8
              The record will resume at 1:20, the
9
    fight.
10
11 (Whereupon, the a.m. proceedings adjourned.)
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1 STATE OF OREGON
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                          )
                             SS.
 2 County of Multnomah
                          )
              I, Jennifer Wiles, hereby certify that I
 4
 5
     am an Official Court Reporter to the Circuit
 6
     Court of the State of Oregon for Multnomah
     County; that I reported in Stenotype the
 7
 8
      foregoing proceedings and subsequently
 9
     transcribed my said shorthand notes into the
10
     typewritten transcript, pages 1 through 160, both
11
      inclusive; that the said transcript constitutes a
12
      full, true and accurate record of the
13
      proceedings, as requested, to the best of my
14
      knowledge, ability and belief.
15
              Dated this 15th day of July, 1999 at
16
      Portland, Oregon.
17
18
19
20
                     Jennifer Wiles
                     Official Court Reporter
21
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